by Donald A. Laird

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PSYCHOLOGY OF SELECTING MEN McGraw Hill Book Company.

INCREASING PERSONAL EFFICIENCY
Harper & Brothers.

APPLIED PSYCHOLOGY FOR NURSES J. B. Lippincott Company.

By

DONALD A. LAIRD, Ph.D., Sci.D.

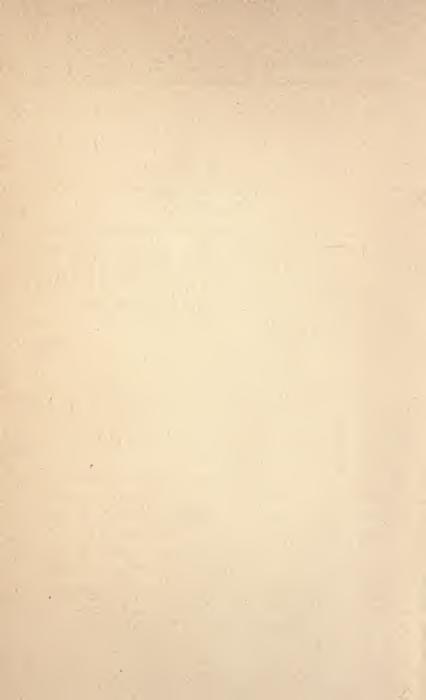
DIRECTOR, COLGATE PSYCHOLOGICAL LABORATORY; FOUNDER, "INDUSTRIAL PSYCHOLOGY MONTHLY"; CONSULTING PSYCHOLOGIST.

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To Drex

Who took care of the rats and kept the laboratory running while I was searching in plants and conferences for the meeting ground of psychology and profits.



Acknowledgments

Henry Ford started this book indirectly. A half dozen years ago the editor of his weekly magazine got in touch with me for a series of popular articles on psychology. I am indebted not only to the publicity department of the Ford Motor Company to use in this volume some of that material, but I am in greater debt for the interest which encouraged the preparation of the articles in which this book took root.

MERYLE S. RUCKEYSER stimulated the production of more material bearing upon psychology and profits when he too got in touch with me during the time when he was formulating the editorial plans for the first issues of "The Executive."

The members of the Central New York Section of the Taylor Society have been a continued source of material and stimulation for the analysis of additional phases of the profits in psychology.

Permission to reproduce essays printed in their publications has been granted by "Forbes' Magazine," "The Office Economist," "Management," "Printer's Ink," "The Scientific American," the Remington-Rand Co., and the Ford Motor Co.

Acknowledgments

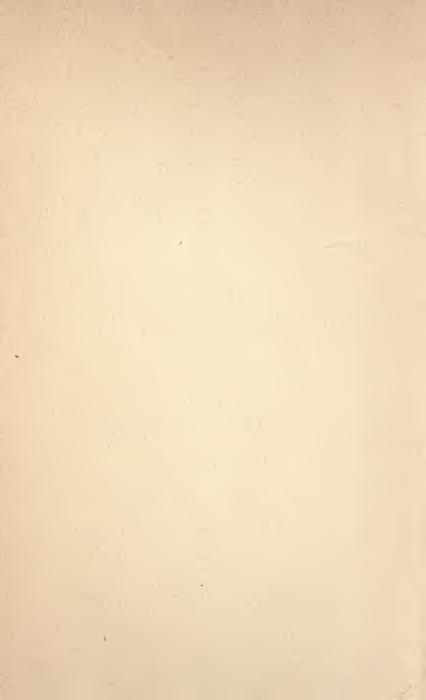
My obligations to the unofficial Lieutenant-Commander of the Colgate Psychological Laboratory, Hilda Drexel Laird, can be adequately recognized only on the dedicatory page. My old student, Professor Jack Tremper, has given highly esteemed editorial help in examining every word of the text as it is being prepared for the printer.

DONALD A. LAIRD.

COLGATE PSYCHOLOGICAL LABORATORY
HAMILTON, NEW YORK
Thanksgiving, 1928.

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PART I INTRODUCTION

A Friendly Word to the Reader

PSYCHOLOGY yields two kinds of profits. One is immediately tangible and can be found on the books. The other kind is found in greater industrial happiness and more complete self-realization. Experience has shown that the second kind also yields in a short time profits which can be found on the books. Many times these are greater than the immediately tangible profits.

The profits from self-realization cannot be achieved from a formula. Most productive of these profits is the psychological attitude in the executive's grasp of his problems. This little book is designed to aid in the cultivation of this attitude. It will fail, however, unless the reader thoughtfully considers the use of each section in his own experience before he proceeds to the next sub-title. The practical value of each section will grow as the reader carefully thinks himself thoroughly into the section until it and his experience blend to form a useful psychological attitude.

1. EVERY EXECUTIVE HIS OWN PSYCHOLOGIST

A FEW YEARS ago one had to possess great faith to see that psychology might have much potential usefulness for the hard-pressed executive. Imagination had almost to be strained to fill the gap between the text books on psychology and the daily routine of the industrial manager's desk. But a few had the imagination. They did not strain it but kept their feet on solid ground. Upon the heels of these pioneers, who were often laughed at even by their fellow psychologists, came a wave of graduate students who wanted to specialize in psychology so they could later apply it in industry. And upon the heels of these graduate students of ten years ago there is another wave — but that is getting somewhat ahead.

While imaginations had to be strained before the war, in the past half dozen years there have been the following industrial accomplishments of psychology which I happen to know about:

In the assembly department of a telephone manufacturer's establishment an annual saving of \$7,500 was brought about in 1927 by the use of motion psychology.

One of the largest taxicab operating companies in the world had accidents reduced by one-third by having a psychologist help in selecting drivers.

In the saw mill of a motor car body builder a single shift is now producing more than a double shift did formerly. Fatiguing walking in a printer's bindery has been reduced to half. And a closer co-operation has been developed between the management and the workers.

Customers in a department store now have to wait 25% fewer minutes (or seconds) to receive their change, due to psychologists rearranging the working conditions and methods in the tube room so that less fatigue is caused.

The piece rate earnings of a group of machine tapestry weavers was increased 10% by psychologists having them rest more in the plant!

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Racks to prevent stooping and similar recommendations by a psychologist cost an oil refinery \$20,000 for the capital outlay, but yielded \$25,000 annually. Not a bad investment by any means.

Rearranging men and materials in an automobile factory department, so that greater freedom of movement was possible, increased the bonus earnings of the workers by 28%. And, paradoxical as it may seem, this rearrangement to give greater freedom of movement also yielded space for increasing the number of workers in the department by 32%.

The output of a group of coal miners was increased 16% by psychologists making a study of the picks they were using and recommending a few simple alterations.

There are other almost phenomenal savings in capital expense and fatigue which have been effected not by professional psychologists but by the regular run-of-the-mine executives who have been reading up on psychology. There is an inherent danger, however, in reading psychologists' reports and then

attempting to try the same thing for oneself. That danger arises because in the reports one is likely to discover only some figures and formulas; what really distinguishes the psychological approach to the problems of business is not so much knowing all the formulas in the world, but having what may be called the psychological attitude.

I know a number of executives who are innocent of any courses in psychology, but who have this psychological attitude to a great degree. Without exception they are outstanding executives, and they lead me to suspect that this psychological attitude is highly desirable for every executive whether he tries to use some tests and formulas or not.

"What do you think of the condition of these machines," a manager recently asked W. Spielman, an English industrial psychologist. She hesitated to answer, telling the executive she was not an engineer.

"No," he said, "I mean the machines sitting behind and working the machines."

The manager obviously did not have a psychological attitude toward his manpower problems.

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Viscount Haldane of Cloan understood this psychological attitude when he said: "It is observed that in seeking to carry out their purposes these people, like many others, are often unnecessarily handicapped by conditions and arrangements made for them by those in control, conditions and arrangements made in ignorance of the hampering effect which ill-thought-out restrictions bring about, even when well meant. Industrial psychology aims at laying bare these hindrances and what distinguishes them, and at showing how the maximum of freedom and liking can be combined with the greatest energy in producing. In this way work can be made less distasteful and more satisfactory to employed and employer alike."

So it is natural to expect that the appreciation of this human side of the "machines sitting behind and working the machines" would in turn be highly esteemed by the workers. This is precisely what we find in these quotations from the mouths of workers themselves:

"Could we have more like this. It has made it a lot easier for us."

"It feels much safer now; we can get on with the work much quicker."

"I wish you had been here when I was a girl; I wouldn't look the old hag I do now."

"This place is not what it used to be; you are not shouted at now, and there's not so many gets the sack."

In England, where psychological work of the sort is more highly organized than in the United States, the National Union of Railwaymen, and the Iron and Steel Trades Confederation have contributed generously to the financial support of the work of their National Institute of Industrial Psychology.

There was a time, only a few years ago, when a long list of academic degrees and a pocket full of colored pencils was essential for psychological work in industry. These researchers are still needed, but thanks to the fruits of their early discoveries the time is now here when anyone with the intelligence and understanding of an executive can use many of their findings to save worker fatigue (and his own!), to in-

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crease output and individual earnings and to have a more loyal group of workers under him. The information is available, and if the executive can become saturated with the psychological attitude which sees human beings and not "machines sittings behind and working the machines," he can reasonably expect his executive services to increase greatly in value.

The late president of a chain of small banks realized some time ago that he was facing manpower problems in his organization as he had never faced them before. So he took matters into his own hands—with which I agree, and with which many of my friends who are professional psychologists disagree. He called in a few academic psychologists as consultants, but they failed miserably in his estimation; they wanted to do too much researching and wanted to take too long a time to accomplish anything. So he decided to develop his own psychologists from within his organization, using outside professionals only to train his own organization. His younger and more alert executives were put to work reading, discussing, and trying out until he had developed a group in his

organization with the psychological attitude who knew where to find psychological information.

In the last year they have accomplished wonders in reducing turnover, preventing defalcations and building morale. It is one of the best examples of psychology put to work of which I know, and it was accomplished principally by a group of executives, such as can be found within any organization, who had literally become saturated with the psychological attitude.

This illustrates the chief way in which psychology can be of use to management, namely, in training the rank and file of executives to be better equipped to cope with their problems of manpower.

You cannot hire another man to work with your men for you. Only you can do that. That it can be done better when technical knowledge has added to it the psychological attitude has been demonstrated time and time again. For instance, in the United States there are not more than five hundred professional psychologists of recognized merit; yet more University presidents are drawn from this group than from

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any other group (clergymen being excluded, since we are speaking not of small college presidents). Most people do not realize, either, that Dr. Hugo Eckener, commander of the *Graf Zeppelin*, was trained as a psychologist in the first psychological laboratory in the world, at Leipzig, where he received his doctor's degree in 1892, and that he tried unsuccessfully to obtain a psychological position in the States shortly after.

There is no mystery or hokum about psychology. In a very real sense it is simply common sense which has been tested and certified as workable. Lots of common sense is just hunch and opinion and is not workable, although on the surface it may appear perfectly plausible. But it may not work because workers are not simple machines, they are machines plus — plus aspirations, prejudices, weaknesses, troubles of their own, peculiar abilities, temperament. A temperamental automatic screw machine has no temperament at all in comparison with its operator.

Executives who have failed in their manpower problems have usually not failed because they were lack-

ing in humanity. My impression is that the typical executive has much more sympathy for his people than even his most loyal worker would vouch for. The trouble is not a lack of well-meant humanity and sympathy on the part of the executive but rather is the difficulty localized in the executive's lack of understanding of human-kind and its motives, strengths and weaknesses.

Insight is what is needed, not greater appreciation of humanity. A consultant, or a book, can give one the formulas; but insight takes personal reading and thought. And it is the insight of the psychological attitude that makes the formulas work.

Where men and women enter into the picture psychology is involved. Jigs and fixtures have to be designed to do one thing well — and they should be designed also for use by human beings. Even the tool designer needs a psychological slant.

Time study men who know their formulae backwards and forwards are often colossal failures when they enter the shop because they are poor practical

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psychologists. They know watches, formulas, and operations — but they fail to understand the operator.

Where there is an operator, the man just above should know how to use psychology. The man hired as plant psychologist often has the least need of knowing this psychology of the worker.

There is still a great amount of rule-of-thumb in psychology, but there is also a lot of established fact. The "man next above" should have a sound working knowledge of this, regardless of whether he is an employment interviewer or a conveyor specialist.



PART II PROFITS FROM THE RIGHT JOB



2. WHERE TO FIND SKILL

SKILL almost to the point of perfection is to be found in unexpected places — if only we seek it out.

A leader in American industry who supports music lavishly is said to have been up against a knotty problem many years ago when he attended a concert. In the midst of one of the selections the solution of his problem appeared in his mind, and since then he has been music's outstanding patron.

It has been suggested that the executive perturbed with some personnel problems attend the first opportunity night at the nearby vaudeville theatre, when amateur talent is given a chance to show its hidden abilities.

A few weeks ago an industrial observer was staying over at Schenectady. He abruptly called off two evening appointments when he found that this was op-

portunity night at the local theatre. He went to the performance seeking not recreation or amusement but looking for a personnel lesson.

An hour before he had given an Italian lad of perhaps ten years a few pennies in exchange for the local paper. When the curtain rose on the first amateur act, there was the newsboy with two older brothers. For weeks they had been rehearsing in barns and alleys the most thrilling gymnastic act one could witness. The lad of a newsboy was thrown from one side of the stage to the other, perilously near catastrophe it seemed, only to land, accurately and safely, high in the air on the upstretched hands of an older brother. There may have been more serious "death-defying" deeds, but none of them gave the thrill that this did because here was the uncovering of ability and skill that otherwise undoubtedly never would have been discovered and developed.

In a waffle shop that morning the observer had been amused by the "raw edges" and squeaky voice of a Vermont granite cutter who was taking a short vacation and did not quite seem to know what to do with

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himself. "Poor fellow," he thought that morning, but after the third amateur act he said "Poor fellow" about himself.

There stood the granite cutter beside the piano in his starchy Sunday best; he was plainly ill at ease. But as the accompanist, chosen hurriedly from the orchestra, picked out the opening chords for him, the stocky Welshman apparently forgot the crowd, forgot himself and held the crowded auditorium breathless with the most thrilling tenor voice conceivable. The observer told me that he used to motor thirty miles to Ravinia every time Edward Johnson was billed to sing; but now he would not step across the street to hear him after Dave Hughes, the Welsh granite cutter from Vermont, brought home the lesson that skill almost to the point of perfection is to be found in unexpected places — if only we seek it out.

Knotty personnel problems can often be solved by an "opportunity night" in the works. One night each week the neighborhood vaudeville theatre features its opportunity night — one period each week

the executive should give to an opportunity survey of his subordinates.

Through vocational misplacement many workers seem totally useless, when a minor change would often revive their zeal and renew their superior's faith in human nature. Edison spent too much time in his baggage car laboratory to be a successful news butcher. His opportunity night came when the conductor in desperation put him off the train with a cuff on the head which brought about deafness.

Patrick Henry would have been a total failure as a correspondent, and Washington Irving could not have earned his salt as a contact worker. Transplanting personalities so that their latent skills are given a chance to reach full bloom will often resolve personnel problems that at first present a blank wall. And it yields the most satisfying dividends to the executive, dividends which are intangible but by which men live.

Gene Buck does not talk about the fortune he is making as a theatrical producer who was once associated with Ziegfield, but he tells you with pride that he discovered the possibilities of Will Rogers.

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He should not take any special pride in this, however, for this is his business. It is the business of every executive.

3. Don't Put too Much Faith in Work

WORK may be a virtue, but its virtue is much overworked.

The statements of eminent persons, in which they credit their accomplishments largely to serious and continued work, should be liberally discounted. Biographers as well as the living should have their statements about the efficacy of work taken with a small handful of salt.

Frank A. Munsey probably meant well and was undoubtedly trying to be truthful when he said, "The fortune I have, such as it is, has come primarily from two sources: the forty dollars capital I brought with me from Maine to New York forty years ago, and the capacity God gave me for work. I am a thorough believer in work." But he told only a logical half-truth.

Henry Ford, Elbert Hubbard, Theodore Roosevelt, and whole hosts of other eminently successful men have all glorified the virtue of work. The executive will make many mistakes in handling his subordinates if he acts completely upon this belief in the importance of work. Time clocks, attendance bonuses, rewards for high production are intentionally used to focus attention upon work. Inspirational mottoes and personal interviews are added to these to hammer into the conduct of the subordinate executives the virtue and wisdom of pure, unadulterated work.

The administrative danger in this does not lie in the possibility of the force overworking itself. Unfortunately, as most readers' experience has demonstrated, this is only a remote possibility. The greater danger lurks in the executive wasting his effort and overlooking what is more significant than mere work itself in producing the results for which he is striving.

Intensive work is usually an effect, not a cause.

Hard work is an indicator, not a generator.

The individual with great ability, by and large, is usually the one who will apply himself without need-

ing the prodding of an embellished motto or reading the lives of great men who also worked seriously and eternally. There are a few dubs, of course, who wrinkle their brows, move by rapid jerks, and try to work hard but at the end of the day have little accomplished to show for their efforts. This is abortive work, not real work. Pep talks focused upon the topic of hard work are more likely to produce abortive. work than they are to inculcate the production of wide, clean swaths each day that indicate real work. The idling pulley on the countershaft goes around just as fast as its twin keyed into the drive shaft of the machine, but it produces nothing except friction and wear. The idling pulley can be speeded, and only friction and wear will be increased.

There are many persons who are not keyed to the drive shaft of their present jobs. Most of those who are keyed to the job do not need to be prodded.

More effective than trusting to the virtue of effort itself is the executive attitude of assuming that the fellow who needs prodding is the fellow who could not do the job even if he did respond to the prods. The

widespread faith in the usefulness of simple stimulation to work harder needs to be supplemented to a large extent — perhaps even supplanted — by the faith that if you have the right man for the job he will not need the stimulation.

An extra week spent in selecting the subordinate may result in saving years of misdirected time trying to get him to produce more.

Work has produced results for successful people because their application to their life's tasks was caused by ability. It is not ability to just work, but ability to do that particular work. Resultful work is a good evidence of inborn skill for the job itself. The real virtue of hard work is in revealing in what lines one's abilities lie. The real slaves in this world are the men of ability; but they will not relinquish their slavery even after they have made the first million.

A mid-western psychologist who some time ago invented a machine to measure mathematical relationships has just now attempted to estimate the impor-

tance of industriousness in job-success. He finds that it merits a rating of about 35%. Luck or accident merits only 15%. And to capacity or ability he gives a weight of 50%.

This is in marked contrast to the reports we find in interviews with men who are upstanding successes. Some of them attribute it all to luck. Those who are less modest give the credit to industrious work on their part. But none of them have been honest and plainspoken enough to give the principal credit to their inborn capacities. Perhaps they have confided to their valets what great ability their masters had; but I doubt it, for great men seldom realized they were great.

True work is self-expression. The able man has more self to express, and true work is a natural outcome. I am trusting the percentages above which were compiled by Dr. Clark L. Hull at the University of Wisconsin, and I am not trusting the modest statements of those who credit the fact that they have worked hard.

Tony Sarg is a hard worker by all outward signs, or perhaps he is getting great quantities of self-expression. Listen to him and then decide:

"Between my marionette workshop on 44th street and my laboratory in Chatham, New Jersey — devoted to the making of animated cartoons for the movies; between the writing of children's books and drawing for the magazines, I succeed in keeping pretty busy. But my early army training has given me such vitality that I have never been able to use up all the energy I have for the daily stint. If I have been sketching all day, for example, I do modeling at night, or toy with mechanics. All of it is recreation to me. If anyone asks me about working, I say I have never done a day's work in my life — and that's the truth."

This busy world hums with work because many men are at jobs for which they have the ability and for which they have a liking. It is not a busy world because they have been stimulated by being divided into teams for a production contest.

The virtue of hard work is in showing that at last the individual has a job that he can do and that he likes.

4. THE SHORT-CHANGE IN HUMAN NATURE

THE POSSIBLE variations in human make-up almost stagger the imagination. In a simple thing like a game of auction-bridge, the number of possible card combinations in the four hands is more than five hundred million. With many more than 52 abilities to be shuffled think of the infinite mosaic of ups and downs that are inevitable in executives!

So we find former college classmates in the president's chair of the General Electric and General Motors. But Swope is a great convention-goer while Sloan keeps to himself. Swope makes direct and incisive decisions. Sloan uses conferences. They are almost diametrical opposites in methods and maneuvers. Each has been short-changed, yet what firm would not be elated to have either join them?

Disappointed in the performance of their subordinate executives, several top-control executives have

talked over these problems with me during the past few months. Where they had thought that it might be possible to use a rating scale or some secret serum to bring their executives up to expectations, I am afraid that I, too, disappointed them.

"You must be the most religious president in the world," soon became the hackneyed introduction to the explanation of their short-change problems. "Otherwise you would not expect to approach Heavenly perfection on this drab earth."

When the man trained in manufacturing per se reaches the point where he has to tackle problems of organization and personnel, he is very likely to be too religious in this sense. His manufacturing experience has taught him that mechanical weaknesses can be overcome readily by engineering ingenuity. And at first blush it seems logical that organization difficulties could be remedied by similar human engineering.

Our psychological knowledge of human differences in skill and aptitude, which is now based upon great quantities of verified experimental work, makes it imperative for the consultant called in on such a prob-

lem to alter the expectations the controlling executive has, rather than to work some miracle upon the personnel with which he is especially concerned.

It is said, for instance, that great men have their moments of weakness. It would be more correct psychologically to say that all men, great and small, have their permanent areas of strengths and weaknesses. Armies cannot advance equally on all fronts; one sector may be fighting a victory while another is taking a defeat. Generals are like their armies. Napoleon came so near the bottom of his class that his parents were probably humiliated, and Ulysses S. Grant was allowed to stay at West Point only by a miracle of tolerance and politics. Edison's school teachers threw him out of school as a hopeless case before he was ten.

This short-change in the great lottery which gives humans their abilities is most marked in a few exceptional cases such as the man who without difficulty remembered the makes and license numbers of all automobiles that had passed along the boulevard in front of his lodgings on any day for more than a dozen

years. A phenomenal accomplishment, and achieved without any great effort on the man's part — but when I knew him he was under care in a western mental hospital and ten minutes after lunch could not remember whether he had eaten or not. While this is a rare and extreme instance, it is worth carrying permanently in mind since it strikingly typifies this short-change. There are many executives who maintain that looking at each of their subordinates with the background of this man has helped them greatly by stimulating them to search for the weaknesses of their subordinates and to delegate and develop with this in mind, rather than to expect equally skilled performance in all phases by each one.

The strong executive knows the weaknesses of his subordinates and is tolerant of these failings because of the knowledge that all humans—including himself—have been short-changed in some respect. Columbus would have become an eccentric wharf character but for the help of the Queen of Spain.

It came somewhat as a shock to the successful and outstandingly conceited president of a large chain of

small-loan banks that even he probably had numerous short-changes. After he had recovered from the shock he took a vacation to take stock of himself. His strong conceit had previously prompted him to take stock only of his successes and his strong points. But he was intrinsically great enough that after once being awakened to the facts of human nature's short-change he spent this vacation period in taking stock of his weaknesses and failures.

It was a highly profitable three weeks. He returned to his office determined to associate closely with him expensive assistants whose strengths would compensate for his weaknesses. This would have been a humiliating move for a thoroughly weak man to make; but this man, great enough to face his own weaknesses frankly and unblushingly, strengthened his controlling reins; and his business increased two and a half times in a year.

The strong man must know his own weaknesses. There is really nothing humiliating in knowing about one's short-changes. As Mose said when questioned about the merits of different breeds of poultry: "It

all depends upon the kind I'm aftah. The white ones is easiest to find and the dark ones am easiest to hide. Both taste good! "

The prevalent notion that the man with outstanding abilities in one direction is vastly weak in others is contrary to verified fact. Greatness in a few qualities is not invariably attained at the price of profound mediocrity in others. Supremely endowed men do have their ups and downs in abilities, but it is not usual for some of their aptitudes to fall to the lowest levels. Due to their remarkable performance in some lines the contrast with their short-changed abilities may be so marked as to make their poorer abilities appear poorer than they actually are when compared to the range of this ability in other men. This encouraging fact, however, does not lessen the importance for the executive who handles the organization to realize and act upon the knowledge that even these slight weaknesses may seriously depreciate an executive's function and that subordinates or assistants should be provided to compensate for the partial vacuum.

A small portion of mankind has the unfortunate negative tendency of looking only upon their failures and weaknesses. We see the inevitable results of this negative inward look in a few associates and friends who carry on with an air of humiliation and inferiority. But for every one of this sort who needs to be directed to look upon his successes and strengths we discover ten who need rather to know their weaknesses and to be great enough to call for assistance just as the general sends reserves to the sector which is on the verge of defeat.

The reserves in the form of skills in others should be called upon for assistance to keep the organization advancing uniformly on all fronts. A frank and complete co-operation magnifies the strengths, a lack of co-operation exaggerates the weaknesses.

5. You Can Never Get a Man to Take Jones' Place

PRACTICALLY everything can be standardized except human nature. In this fact lies both the bane of maintaining a going organization and the blessing that has brought centuries of progress. Ancient Sparta tried to organize itself on the assumption that human beings could be standardized; how well they succeeded is revealed by history's recording scarcely an eminent individual during Sparta's dominance in the world.

In the industrial organization this extreme unlikeness of any two individuals is not especially serious for the routine production employes, but for the executive employes it is the foundation of the major problems of the man on top whose job it is to keep the organization working smoothly and effectively.

It is said that Henry Ford has no organization charts. The motor master is psychologically wise in this since the great variability of humans of executive

calibre demands either of two drastic courses. For one, whole sectors of the charts have to be changed when a new executive replaces one who is transferring, if the organization is to give a complete opportunity for the full sway of the new man's abilities. In case this rather large scale reorganization is not undertaken and an idolized organization chart is held sacred and all-powerful in producing dividends, it will result in the newcomer's being unable to give the firm his fullest abilities. He can never fully take the place of his predecessor, regardless of how capable the new man may be, because no two men in this wide world can be alike in abilities.

This results in deflating a position which one executive worked into a \$10,000 value when it is taken by a very capable man, who on account of these individual differences, cannot produce this value because a neatly drafted organization chart restricts his job functions to the make-up of his predecessors. A direct economic loss is produced in hundreds of firms this way each year. Equally serious is the human loss caused by the new executive having his person-

ality and skills cramped into the restraining job functions set by the previous occupant of his swivel chair.

New executives should not be expected to fit into the organization as two parts of a standardized machine click together. The new executives should be given every chance to work into the organization—which demands some elasticity on the part of the organization, and a period of time for the mutual adjustment to take place. An organization based upon an earlier group of executives and rigidly adhered to will inevitably reduce superior men to mediocre performance.

If your executives were expected to have only ten different abilities and these ten abilities varied by only five degrees, it would still be necessary to scan several thousand men to discover two with the same permutations of these varying abilities. Probably no two men will be born into this world during our lifetime who will have the same inherited abilities at birth. And their education and daily experiences only serve to magnify these differences. In the important but diffuse trait of leadership, for instance, it has been

discovered recently by psychologists specializing in work with children, that one six-year old may readily have several hundred times as much practice in exercising leadership as another. With a difference of only one percent at birth the vicarious experiences of the first six years of life have wrought tremendous changes.

Executives being born different, and made still more different by life's varying lessons, the task of the man who manages management cannot be settled and left with the assurance that things are now perfect. On paper it may look ideal; but let one new executive come into the scene, or let some of the established executives have a changing series of lessons in the school of experience, and the whole structure may need rather thorough overhauling.

Policies have to be studied eternally and must be altered to fit the men inside as well as the customers outside. The too common result of competition is to force an abnormal proportion of this study to the customers. There is an executive personnel demand

which repays acknowledgment and adjustment as well as does customer demand.

Modeling an organization too closely after another successful going organization is beset with danger because you never can get the same individuals or another set of executives exactly like those of the organization copied. And "exactly" in this instance is more than a scientific quibble over unimportant amounts. Many partnerships are aware of the financial value of this difference and in consequence take out heavy insurance on the life of each partner.

The firm salaaming to an organization chart would be wiser to realize that this miraculous assortment of rectangles and connecting lines needs less study and observation than the men actually on the jobs. The chart can be duplicated or changed readily; the human nature of the executives, whose alleged functions it represents, cannot be duplicated or changed. The chart can map the progress of an order through the offices or a part through the shop, but it cannot map the ebb and flow of human ingenuity in the production of a single valuable idea.

6. THERE'S NOT AN OLD WORKER IN THE WORKS!

It is justifiable pride an organization feels when it boasts of having a force with half the employes men of ten or more years service. But that accomplishment of holding men has not helped much toward solving the labor problems due to changes in our world.

Each long service man is actually a new man. Psychologically he has a different slant on life and a conception of what he wants that is vastly different from the ones he brought to the company with him.

These long service men may be the focal point of many problems, because the company policy is likely to be attuned to the man as he was ten years ago. These changed men must be studied, not condemned.

When we read that the Tammany chieftains no longer wear scratchy wool underwear but that they are buying silk unmentionables in dozen lots, it is wise to pause and consider what changes in habits and desires this modern world has brought about in the man with long service behind him.

Movies, radio, advertising, magazines, and to some extent automobiles, have made him want more things and better things than he did ten years ago. He also wants more time to enjoy these away from the hum of the shop or office. He wants to go more places and see more things. He dresses differently, talks differently and is a different man from what he was when he first brought his lunch kit through the gate at the close of the war.

His interest in old-fashioned politics has ebbed, but his other interests have broadened and strengthened. They have taken him so far into installment purchases that he dare not quit his job for fear of being disgraced in the neighborhood if the things were taken back. It doesn't mean that he likes the company because he works so hard to keep his job.

Human nature itself has not been changed by these new forces in our present world, but it wants and thinks differently. This change has been discovered by the selling organizations. The force of this change in human relations in business is as great as it is in selling. Only a few manufacturing executives seem to

have discovered this vital point which makes many of the policies held to since 1912 as antiquated as if they had been held over from the War of 1812.

Unchanging human nature must be studied and its changed elements analyzed for each company in each locality. Whether these changes have been for better or for worse, they must be discovered by each executive so that he will understand again the long service man whom he once knew.

A census of your acquaintances will convince you that those who think these changes are only for the worse, probably because they are not ingenious enough to adapt their business to the changes, are the ones who are also wondering why business is so bad.

When silk underwear entered Tammany Hall it may have blasted our conception of politicians, but it is a good thing to know about the change since we have to sell them supplies, manufacture these supplies, and live under their laws. There are a great many other conceptions which will be blasted by a study of the changed worker — profitably blasted.

7. THROUGH AT THIRTY OR JUST ARRIVING AT SIXTY?

Are young heads or old heads the better?

Should there be more young presidents since the president of one of the fastest growing automotive firms is only thirty-five? Or should the premium be reserved for the older man?

The long service man usually receives a premium in greater remuneration for the same job a younger man performs, but it does not follow that older hands should be sought for filling vacancies.

Insulin was discovered by Frederick Banting when he was thirty-one; Darwin's theories were worked out before he was thirty; the use of ether was developed by William Morton when he was twentyseven; the gonorrhea bacillus was discovered by Neisser when he was twenty-four; and red blood corpuscles were observed by Jan Swannerdam at the age of twenty-one.

The young man has no need for shame at the accomplishments of those of his age. But may these ac-

complishments be mere flashes in the pan? That depends upon the young man — he may stop, but that reflects his own premature self-satisfaction and no fault of his years.

Benjamin Franklin was of most service to his country after he had passed three score years; the iron hand of Bismarck held Germany when he was eightyfour; Cervantes was nearly seventy before he wrote Don Quixote.

The old man has no cause for shame in the accomplishments of those past the allotted three score and ten. But may these be merely the result of dogged persistence and not a reflection of superior ability? That, too, depends, but persistence is a virtue not to be scoffed at.

. . . .

Neither age nor youth is a virtue. Many old men have not profited by their years of experience. Many young men are old fogies before they pass the quarter century.

The race of accomplishment and worth goes not to young heads or old heads, but to good heads that are used.

Of lasting credit to this generation is the homage and premium it pays to ability, regardless of whether a lithe young body or a cracking aged frame carries the head that can accomplish. Lindberghs and Depews share in the acclaim.

But some executives prize an organization of older men, others take pride in their organization's being built up around young men. Both are blind. An organization is built up around heads, not calendars. Black Jack Pershing was raised through the army ranks more rapidly than the calendar allowed—President Roosevelt had learned while he was one of the most successful police commissioners New York City ever has had that ability and performance, not mere years on earth, determine the intrinsic value of an employe.

The young man must not expect success to come to him in later years just because he is getting older. The rewards are for ability that is developed and used.

The employer must not believe that his older workers are of more intrinsic value unless he has encouraged and helped them to develop into their full abilities. Men do not improve with an impassive age as does a rare wine. Additional years only add infirmity to men unless the men themselves are active in striving to add to their worth each year.

The question of youth or age is irrelevant in business.

The lasting question is discovering, developing and using abilities so that each year actually adds to the intrinsic worth of the man.

Strike from the application blank the item inquiring about age and ask instead: Do you have a good head? Do you use it to its capacity?

8. DEALING IN FUTURES

Business needs seers —

Four years ago Albert came to work. It was against the protests of the man under whom he worked, for he gave every indication of being as hopeless a case as can be imagined.

A month ago Albert's former supervisor recommended him for a position paying twice the salary the boss was receiving. A week ago Albert started work on the new job. Now there is no living with the protesting boss of four years ago who is as proud of Albert's new job as though he were a boy with his first pair of red boots.

This series of incidents opens up a vital phase of management which is frequently neglected.

A correct diagnosis of Albert four years ago was that he was hopeless, almost an eccentric in appearance, manners, and ways of working. Every executive has had many similar hopeless cases apply for employment. Usually they are turned down

because their immediate possibilities are difficult to discover.

But in reality Albert was a genius at writing unusual advertising copy. He forgot orthodox methods of working, overlooked ordinary conventions in dress because he was all absorbed in putting magic words on paper. No casual employment interview ever would place him properly.

Gauging young men and women who are seeking employment is always beset with the pitfall of trying to fathom what they are now rather than what they can become. Every young employe reporting for work should be visualized as a worker ten years older and with ten years more experience — what will he be like then?

The inner powers of the man, not his first impression, yield light on what ten years will add to him. But of importance are the experiences of the ten years themselves. The man he will be depends as much upon the men he works under during these years as upon the inner powers of the man himself. Every executive is unwittingly dealing in human futures—

size up his ten year men to judge how effective he has been in this human brokerage that builds organizations and unearths abilities to work for the company.

That tremendous numbers of executives fail in this is acknowledged implicitly by the widespread development of training departments which can never do the job as well as can the top-notch executive — but they are apparently a necessity, since failure in this executive function keeps many a notch or two from the top.

"Raskob has made many millionaires," passed across the lunch table is a high compliment to his dealing in human futures. "Jones can't keep his men—they all leave for better jobs after he has helped them along" across the same table is just as high a compliment although the millions of dollars may have fled from the scene.

Only a kind Providence will ever understand why so many people are built to appear hopeless cases. Perhaps only the same source knows why so many executives fail to deal in these futures which are too precious, individual and industrially, to be left to

chance. It is absolutely easy to find what is wrong with any applicant, the true executive task is rather to study the applicant and to discover ways and means of developing his best.

The many heads and shoulders which have emerged above the crowd without the aid of an executive seer who dealt in human futures are testimony of the great potential of a small group of mankind, and are not in any sense an indication that the best policy is to let water seek its level.

The employment manager of a specialty stamping concern with three distinct selling organizations recently told me of his experiences with two of their division sales managers. These experiences extended over the period of years since the war and dealt with the selection of office assistants. Sales manager A was eternally complaining about the young men sent him from the employment office; he fired them about as quickly as the employment manager could hire them. Sales manager B, in great contrast, always greeted the employment department with "That last young fellow has great possibilities,— watch him!"

With the same materials supplied from the employment office B produced almost phenomenal results, while A was able only to see the faults and did not possess the knack of magnifying and developing his material. A wanted predigested help in homeopathic doses, unwittingly admitting his failure to develop them. B was an executive seer; he will soon be vice president and general sales manager.

The executive must have faith in human nature; nothing encourages this better than to be a seer, able to vizualize and develop the potential working under him.

The executive must have faith in his nature; nothing stimulates this better than to look at those who bear the stamp of his careful dealing in futures.

He must be a seer!

9. LITTLE CREDIT TO KEEP A JOB

TEN, TWENTY or thirty years with the same concern sounds like a record of merit. It may be, and it may not when you once look inside the mind of the man who has retained you all these years.

The hardest job detail which faces four out of five executives is letting an employe go. It is fairly easy to make up one's mind that the employe is not much of an asset — but it is a different situation when courage has to be gathered to tell him that he just doesn't fill the bill.

Last Friday I was talking with the principal executive of a well-known firm. "I ran into Jones in the hallway," he said, "and stopped him, intending to call him into my office and give him thirty days notice. He told me that his little girl was ill with pneumonia, and what the hell was I to do then!

"For the past three weeks I have been bothered more by this than by the difficulties of obtaining credit for an additional half million. It is one job worry I haven't been able to shake; it bothers me nights.

He has been given every opportunity, we've tried him at different minor executive jobs and he simply hasn't the stuff."

From mental test records and job rating schedules I knew that this man was lacking in the stuff. But he stuck on the payroll, probably thinking he was making good when his superior was simply trying to work up sufficient courage — or temper — to fire him.

I find that the majority of executives have this "sob streak" in them. It causes a tremendous industrial loss each year in keeping incompetents. Some of the incompetents merely need transferring to a different type of work more in line with their abilities. Some of them need stimulation rather than termination. Many of them, unfortunately, have been victims of too much ambition and false signs of ability; and a wide open gate policy is the best for both plant and individual.

Unless Joe was discharged hastily as the result of coming to work while intoxicated or some similar cause, you can safely wager that the chief has been

trying for six months or more to develop courage to let Joe go.

A friend who is exceptionally able in controlling the reins of a 2,000 man plant near my home has had this sob streak as his worst enemy in management. He has never discharged one of the executives under him except for flagrant indiscretions, and he did even that reluctlantly. But he has effected several changes in personnel which are in the records as quits. He usually decides about eighteen months before the man quits that he must go.

He gives the man a chance first, and tries him on several different types of work, hoping that he may make good on one of these tries. Most executive work is so similar, however, that the man poor on one executive job is not especially likely to improve on another — unless he suspects that the change means that he has to do better than ever. When the changed job does not improve the man, the usual wage increases are passed by for him. Then if the man does not get a job elsewhere, work is piled on him in unreasonable amounts until he finally quits in protest.

This is really more cruel than a thirty day notice, but is a typical picture of the expensive weakness of most executives.

A feeling of "impending doom" is carried through all an executive's work for weeks at a time when he knows Brown, or Smith or Blank must be let go but the executive thinks of the man's family and reputation and, chicken hearted cuss, keeps him on, hoping for a good excuse for suddenly firing him.

Practically every plant needs a good personnel cathartic in the form of a long discharge list to clean out poor timbers in the structure, and to free the top minds of a heavy load of trying to work up courage.

As a preventative of a future personnel congestion, added care is imperative in selecting men. The policy of "try him, and if he does not make good fire him" is pretty in theory, but seldom works out in practice because of the widespread reluctance to discharge a man except when in an ill mood.

Pointing out weak spots which should be improved is of little fruit in many employes. They are apt to think that you are biased or that you are narrow-

minded and do not appreciate their valuable qualities. Even pointing out a worker's shortcomings on the job is a task not relished by most chiefs. I have known of many workers who were helped develop by a supervisor who was eternally pointing out traits they had to overcome. But I have known many who responded to well-meant efforts of this kind on the part of their boss with "Applesauce" as soon as his back was turned.

A very successful management engineer told me about the first job he had after graduation from college. It was on the construction of the Cos Cob power house. Being a college graduate, he felt pretty sure of himself and was not prepared to be called into the office and told: "You're good, Smith. Too blooming good, in fact. But I guess this outfit will have to worry along without you. If you find out in two or three months that you aren't so good, come back — we may have another job for you."

He had been spending a good share of his time pointing out what he thought were engineering blunders, and then arguing that he was right. Giving him

his check cured this, and two months later he was back ready to do his job and not to find fault with how the other fellow worked.

I wonder if he ever would have recovered from his annoying trait if he had not been given an unexpected vacation? The sob streak which keeps on the job men who will not improve does widespread industrial and individual injustice in placing a premium upon incompetency.

10. IS INDUSTRY STIFLING INTELLIGENCE?

Is industry becoming more of a moron with each advance in automatic machinery? There are many who think we are a nation of morons. Is industry really stifling American intelligence by its mechanical advances? This is a serious question for its answer determines whether America will be a nation of morons a generation from now.

In June I visited a glass factory whose name is probably on much of the better glassware in your home. A sweltering hot room with low stools scat-

tered around the floor was peopled by slow-moving, dull-faced men. Most of them were past middle age. They were collecting small pellets of molten glass on the end of a blow pipe, shaping it roughly with a stick, and then blowing a small ornamental glass bulb which you may have hanging in your hall fixture now.

We walked past the furnace where the molten glass was heated, shielding our faces from the light and heat. A few steps brought us to a machine of which you could get two in your garage. This was connected to the vat of molten glass. This room was much cooler than the other. Whir-r—Click—Whir-r-—Click. Clank! The machine stopped. A bright faced young man made a few adjustments. Brushed away some fragments of broken glass. Pushed the red button on the controlling switch, and went to the other side of the machine to see if the bulbs were being blown properly by the machine. Whir-r—Click.

"Wonderful machine," I said. "Much easier than blowing the bulbs by hand."

The vice president who was showing me through the plant smiled.

"Wonderful, but not easier," he replied. "In the room back of the furnace are skilled glass workers. But not one of them has the skill to operate this machine. A blowpipe, a stick, a mould, and a long gentle blow are all they can understand. The young man who has to adjust this machine continually is one of the most intelligent workers we have. If he were to quit we should have to get one of our research engineers to run it."

No morons were in demand by that machine.

"How perfectly simple," my wife exclaimed a fortnight later when she saw, for the first time, an automatic screw machine which made some of the parts of the typewriter I am using.

The man watching over its operations gave her a puzzled look.

When we were out of hearing distance the works manager said, "If John hadn't been sworn out the last two hours you'd have had an earful! He has

been having trouble with the machine. Couldn't get it to work the way it should; parts off a thousandth of an inch. The master mechanic told him about half an hour ago that it was perfectly simple. Didn't you see that look? I brought you up here first because I wanted to see if production had started on the machine again."

A moron would have been of little use in operating that machine. Or just try to repair your typewriter if you think industry is reducing man to a machine. When I think of the trouble I have in simply changing a ribbon I marvel at the dexterity and skill of those I watched assemble and adjust typewriters that afternoon.

We were watching the shadows cast by the floating clouds on the surface of Lake Michigan not a block from Vice President Dawes' home. I had spent several Sunday afternoons with the employment psychologist of a large Chicago concern watching the clouds and our ideas pass over the horizon.

He told me how each year he had charge of employing 6,000 men. These are engaged to do what many of my pessimistic friends would call work requiring low intelligence. His test results show that not a high level of intelligence was required for many of the jobs. In fact, he had to devise a special intelligence test which was accurate for low levels of intelligence, to use in selecting their workers. But they were not able to secure enough workers of the intelligence needed for the work!

As you or I would look at the intelligence score standards they had found necessary for the various positions we should perhaps exclaim that they were building a nation of morons. But when we learn that they are not able to find enough applicants with adequate intelligence the inference is immediately reversed.

There are undoubtedly numerous industrial jobs that a person with low intelligence can perform. These jobs, however, are not as numerous as many think. And to fill these jobs there are at least three quarters of a million feeble-minded busy and self-

supporting to prevent them from becoming public charges or social menaces.

The other side of the picture is shown by a conversation I had with a manufacturing executive in December. "I'll hire, on sight and unseen, every college graduate from Colgate whom you'll certify has high intelligence. We need them in our factories."

It isn't morons that industry needs.

II. WHAT'S BECOME OF THE OLD-TIME CRAFTS-MAN?

Gone are the days —

Of hoop skirts, ping-pong, high-wheeled bicycles, torch-light parades, free lunch, heavy breakfasts, comfortable shoes, a pocket full of silver coins, and side burns.

And many would add craftsmanship to the bygones.

Walking down the main street of a village in India we find the entire industrial activities of the com-

munity dissected for us. The one-man pottery is in full blast, shaping a vessel of which there is a duplicate no place in the world. Next to him is the one-man coppersmith hammering on an article which is an exact replica of nothing man has cast his eyes upon before. The dairyman and his one goat herd pass down the street, serving his customers directly from the dairy herd without the intervention of straining or bottling.

Those are supposed to be craftsmen we have seen.

Not so many years ago all the industrial activities of the world were performed by craftsmen. They had no particular production schedule. They had no particular price for their commodities; the price charged was usually what they thought the customer would stand for. No two articles were exactly alike. All showed the crudities of rough hand construction. They were designed largely to please the fancy of the maker and without regard for points of mechanical superiority.

The craftsman was his own boss. He worked when he wanted to and how he wanted to. So long as he

had a small woodlot and a tidy garden plot, the responsibilities of his "business" rested lightly on his shoulders. Life could be one grand *siesta* if he chose, and especially if he had a large family of children to provide pension-insurance for his premature old age.

Those were the days when workers were *men*, and men were *craftsmen*, and had not been subjugated to the iron mastery of a machine.

If they were craftsmen, then the Weary Willie who repaired my umbrella last fall and drank a half dollar's worth of bay rum with the fee he earned was a craftsman. There may have been some craftsmen in these "grand-old-days-never-to-return" but I am afraid that if we keep our emotions quiet for a consideration of facts we shall discover that most of them were merely tinkers who botched most of their work and were utterly lacking in the skill that the real craftsmen of today must exercise to produce the perfect-working, standardized conveniences and luxuries you and I demand.

We occasionally buy an antique which was made by one of the master craftsmen of yesteryear. But

never for utility. While we praise their skill and bewail the present machine age, we paradoxically call the lie by using present day products and just looking admiringly at the craftsman's contrivances. There is a romantic glamour about the antique, but not onethousandth the craftsmanship there is to my typewriter, or my car, or my house.

I visited a unique institution last summer. The avowed purpose of it is to revive the old-time craftsmanship. Printing is the avenue of self-expression they use. I went to their establishment expecting to find the "craftsmen" all busy, due to the wonderful opportunities they had for self-expression. But in the six visits I made them only once did I find them at work. They were too busy "crafting" to wash the ink off their type, which was corroded with dried ink; the pliable rollers which distribute ink over the type surface were also covered with dry ink which was checked like a mud-hole baking under the summer sun. They were calling inaction craftsmanship.

You will discover many who find an appeal in oldtime craftsmanship because of the unlimited opportunity it offered to take life easy. They do not realize that man's muscles and brains have been superbly engineered for work.

It is a disappointing revelation to find how many think that craftsmanship means unshorn locks, a windsor tie and sheer laziness.

A young woman of my acquaintance came to New York from the sunny south. She had completed one novel and wanted to work on a second. Her writing skill was marked, and she found a publisher who would pay her living expenses while she was writing her second novel. When she submitted the synopsis and first chapter he was enthusiastic.

It seemed that she would never complete any more of the novel, so the publisher's editor telephoned her. She had moved and left no forwarding address. The editor was irked, but he felt when her money ran out she would return.

A few days later a young woman with a mannish suit and a plaid windsor tie entered his office.

"Living in Greenwich Village?" he said.

"Yes. And it's perfectly wonderful," was her reply.

"How's the story coming?"

Out of the sleeve of her velvet jacket she produced a few typewritten pages. A single chapter!

"Your first novel will be your last novel," she was told, "unless you get out of the Village."

She said mean things, and wept bitter tears, but the "terrible editor" controlled the purse strings, and she left the Village. Now she laughs about the "sillyninny" she was in confusing atmosphere with art, inaction with craftsmanship.

The old blacksmith who used to shoe my grandfather's horses and put new tires on the wagon wheels some think was a craftsman. He was happy, without great worries, and could do his work without painstaking care.

Was he craftsman enough to make a repair part for a typewriter he had never seen and send it to a

missionary in Ceylon? He may have been, but the chances are against it. He knew only the crudest measurements and gauges. Accuracy to the thousandth of an inch he thought was used only by astronomers, and he thanked his lucky stars he was not an astronomer.

Engineering precision, strength and perfection are the watchwords of every factory. The blacksmith of yesteryear knew none of these. He knew happy sparks, the ring of the anvil and a precision-free idyll of life.

Like most of the old-time craftsmen he did not know the master craftsmanship of the modern factory. And like most of the old-time craftsmen he would be without a job because he was not enough of a craftsman to meet the demands you and I have placed upon the manufacturers of the necessities and luxuries which make us craftsmen in the Art of Living.

12. How People Differ Mentally

THE INDIVIDUAL was lost to psychology until the versatile English scientist Francis Galton tried to get the answer to some homely problems about human nature. Laws of memory and mental association that held for all human beings had engrossed the efforts of scientific students of human nature before he unearthed some spectacular findings. Laws for the operation of the senses had been thoroughly studied, but how one person differed from another almost had been neglected.

This new field of "type psychology," "differential psychology," "individual psychology," "variational psychology," or whatever it may be called by the time these lines are printed, has revealed such interesting and even startling information as:

The slow worker is *not* the accurate worker. The old adage of "Slow but sure," or "Haste makes waste" has been found untrue — although they may be excellent admonitions for us individually when we are excited and attempt to work faster than usual.

The person with a good memory almost always has also good reasoning powers.

The hearing of the blind man is no more acute than that of the average person.

Practice in remembering the cards that have been played in a bridge game does not improve memory for names or faces.

Three or four people out of every hundred are unable to tell red from green. Men have this defect more than women do.

A mental age of twelve years is essential for one to drive an automobile safely — and there are several hundred thousand adults in the United States alone who do not have this rating. (There are no facts that I know of about rear seat drivers.)

The best time for learning is from about sixteen to twenty-five, but learning capacity at age forty is but little less than at twenty.

Practically every person has some marked weak spots in his mental outfit, regardless of how accomplished or skilled he may be.

Brain size or head shape has little to do with an individual's mental capacities.

Individual differences in blood chemistry *may* have a close association with mental differences.

The charming after-dinner speaker may be a total failure at writing letters.

College professors do not have as much intelligence as most people think they have.

Some people are able to hear perfectly except notes of certain pitches.

About five people out of every hundred have a peculiar sensory-linkage in which they associate certain colors with sounds they hear, known as synaesthesia.

Some people can work with decreased fatigue after being irradiated with ultra-violet rays, while other people are more fatigued after exposures to these rays.

Practice has the surprising effect of making the differences in mental ability between two people all the

greater, the one better at the start of the practice usually improving the more.

Some high school pupils can add simple arithmetic problems six times as rapidly as other pupils in the same classes.

Some women have three times as much strength in their right hand as other women have.

Some people can tap with their left hand only twenty times in half a minute while others can tap 225 times in the same interval.

Brothers and sisters resemble each other mentally more closely than do unrelated boys and girls. Twins have closer mental resemblance than mere brothers and sisters.

Probably there are not two people in the world with exactly the same mental make-up.

Environment may mould these individual differences somewhat, but it is not the cause, and does not generate the differences.

Country boys and girls grow more rapidly than children living in the city.

We continue to grow in general intelligence at least up to age eighteen, and do not stop at age four-teen as early mental testers had thought. Perhaps we grow in this trait after age eighteen, but it is not yet definitely known.

Most of our sensory capacities improve with age. This has its disadvantages as well as advantages, but not in the exception, the case of pain, where the sensitivity decreases as we get older.

Some children are able to make keener discriminations of musical pitch than the average adult.

Mental growth from childhood to maturity is not regular and uniform; some functions are improving rapidly while others are standing still; just when one high school girl may be improving in visual acuity another may be making no progress in this trait.

At about age twelve most girls have a pre-adolescent spurt in mental development, while boys do not have this spurt until they are a year or more older.

Sensory capacities mature sooner than those of the higher mental processes.

Brain cells are actually lost as we get older. By the time one is 75 there may be a loss of as much as 100 grams from the cerebrum.

Memory, originality, and initiative seem to suffer most with advancing age.

College men are better at arithmetical reasoning than college women.

But the average woman has keener sensory acuity than most men, and she usually excels in memory.

In proportion to their intelligence, girls usually have better scholarship than boys.

A girl has to be more feeble-minded than a boy to be taken to an institution for the feeble-minded for care.

It is possible that men vary more in their abilities than women do, that is, there may be more geniuses and dumb-bells among the men.

The average white person grades about two mental age years above the average colored person.

The Negro is more like the white man in sensory capacity and muscular control than he is in the higher mental processes.

Whites mature at a later age than do Negroes.

The Hawaiians are probably the most intelligent of the brown races.

Nothing scientifically acceptable is known about mental differences among the white races.

One can be a skilled machinist without being particularly gifted intellectually.

Genius is not a close relative of insanity.

Age of parents does not appear to have a determining part in the abilities their children will possess.

Children of large families are usually less intelligent than those of small families, although there is a tendency for men of great genius to be born in large families.

The oldest child is usually the most gifted in the family.

An unusually large percentage of delinquents and criminals are feeble-minded or closely bordering on mental disorder.

More intelligence is required to be a successful baker than a successful farmer.

City school children are usually of better mental abilities than country school children. This difference is not due to poorer teaching in the district schools of the country regions.

The average intelligence of men is greatest in Oregon and least in Mississippi; the difference is about two and a half years mental age.

The intelligence of men in the Pacific coast states tends to be a little higher than that of men in the Eastern states.

The newer generations of Negroes are more intelligent, due to an admixture of appreciable amounts of white blood in their veins.

Pioneers almost invariably have been better equipped mentally than the people who stayed home. It is not so much that the city offered better opportunities that more succeed there, it is partly due to the more intelligent young people leaving the country and coming to the city as a present-day pioneer.

Almost anyone can make an average success in any occupation.

In most occupations the best person is three or four times as capable as the poorest.

The individual who is eminently successful in one field may be a total failure in other occupations. Napoleon — who himself was a wretched speller — appointed the great mathematician La Place to an important position in his cabinet, where the mathematician proved to be hopelessly incompetent.

If human beings differed only in five traits, each of which was possessed in one of five amounts, we should still have to test more than three thousand people in order to discover two that would be alike.

There is no indication that blonds and brunettes have different mental traits caused by their hair color, or even revealed in any way by their pigmentation.

People with abnormal amounts of blood phosphorous are likely to have good nature, while those with an excess of blood creatinin are apt to be excitable.

The redness of the blood is no indication of the "pep."

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The individual with one of his higher mental processes well developed is likely to have all his higher mental processes well developed. But one or two of his simple mental processes may be developed to a high degree without indicating in any trustworthy fashion that the other simple processes are at all acute.

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It is apparent from all these fragments from recent psychological research that human nature is the most unstandardized thing on earth. And in this very quality of variability and difference probably lies the great fascination human nature offers for study or just plain enjoyment.

Galton, the Englishman, and James McKeen Cattell, the American psychologist, started the veritable deluge of laboratory work that has resulted in the discovery of the individual. This study of individuals is now consuming the research activities of probably between two and three hundred American scientists. Despite the amount of highly practical information that has been accumulated the most work still lies ahead, beyond the peradventure of a doubt. De-

partment stores, factories and taxicab companies have engaged specialists to study and select individuals who are predicted to be best adapted for various jobs. But I know of no enterprise which is attempting to make all human beings alike. Oldfashioned psychology implicity assumed that we were all alike, and many laws were formulated from the armchair in precise language. These old laws now have been transcended by one great law that no two individuals are exactly alike in their mental constitution. Each one is not a law unto himself, but each is himself. Yet we see many people who are trying to be like somebody else when their primary task should be to find out their real selves and to learn how to best express this individuality in work and play.

13. How to Tell an Executive from a Clerk

I could give several manufacturers in the United States precious information about some developments one of their competitors is rapidly heading up — just because an executive who wanted to impress me with the importance of his job told me things which I am certain would cause his immediate discharge if his employing corporation knew he had revealed them to me. That his job is important, I am convinced. That it is more important than he is, I am also convinced. In fact, I have the opinion that he is still at heart a clerk who has not grown up, despite the responsibility he has had.

There is much haranguing about executives not being able in many cases to throw off routine tasks which any clerk could do for them. Being able to get away from routine, however, does not give the key to the successful executive. One can rid himself of all routine and still be at heart a clerk.

A private secretary is merely a stenographer or typist who can be trusted to keep office business

within the four walls of her office. She is not necessarily more highly skilled with the typewriter and note book than any of her sisters in the general record room. But the business that goes across her desk is routed into official channels, and goes no further. Her remuneration is higher because her tongue knows discretion. The premium arises from her knowing what not to say.

The gossip streak which the secretary is paid for not having can be found a yard wide and not all bull in hundreds of executives. It indicates that fundamentally they are clerks who have managed to get away from routine. It usually means that further promotions for them are going to be small recognitions for long service, not for increased worth.

A president with fifteen major executives kept exhorting them to get away from routine and provided them with clerks at every need. He did not become aware of the fact that this thoughtful provision did not keep his executives from being clerks at heart until a rather distressing incident was precipitated by a clerk in executive's clothing. In discussing one of the sub-

ordinate executives with this department head, the president said, truthfully but unthinkingly, "Lewis must not be given much responsibility—he is not especially sane; emotionally erratic." The next night Lewis burst into the president's home at dinner time, with a pistol in his pocket, and screamed, "So you think I'm crazy, do you? Well, damn you, I'll—"

The president recovered before his wife did. Lewis is still in a hospital. And roughly half of the major executives are no longer major executives; they have either taken the minor jobs offered them or have gone elsewhere. The department head who had told Lewis what the Big Boy said about him "resigned." The Big Boy is now surrounded by a group of Big Men who earn the premium they are paid above the premium their private secretary receives.

Trustworthiness in financial matters can be bonded by a surety company. Trustworthiness in other company affairs is often more important, and no insurance can be purchased to cover this. It must be sought in selection and promotion, and it must be carefully nurtured.

"I wonder what Limpy John is developing now," questioned a lounger in a club upstate. When absent they called him Limpy John, when present he was called President John with considerable awe.

"If you can find out you're the first man who has yet succeeded," answered another member of the group. "By the way, do you know how he is able" to keep all the old women and the shop gossips from spoiling his business? Before he gives anyone responsibility he tries to start some gossip through them. If he ever hears a suggestion of the information leaking out, he just lets the employe leak out along with it. Farrell, of the state bank got his boy a job at John's plant when college was over, and the second week John called the boy into his office on a perfectly innocent mission during the course of which John told him they might expect a stock dividend soon. Two days later old Farrell stopped John on the street and said, 'I see your business is going good, but why didn't you tell me you were thinking of declaring a stock dividend?' That was the end of young Farrell."

It is a valuable business asset to be able to keep forthcoming developments within the firm family until every phase is safeguarded aganist miscarriage. Henry Ford's development of the new Model A is a superb illustration, as is also the confidence with which two other motor masters — Chrysler and Dillon — engineered the merger of their plants.

It seems to be chiefly the small fry that is inclined to gossip about what they are starting to do and sometimes they appear to be liars because things for this type have a peculiar facility of not being consummated. Either their gossip gives some quiet working executive a suggestion which he follows up while the other is still talking, or the gossip streak has undermined confidence in trustworthiness which insurance cannot protect.

No firm is too small or too secure to neglect this trait in its executives. In fact this gossip streak can wreck most havoc in the small town or small plant. In the small town it wrecks people as well as plants.

There is a bank in a small Ohio town which recently lost the business of the only manufacturing

plant there because the cashier told his wife what the salary checks of some of her friends' husbands were.

"Tell the world" had been taken off in the phrase tell the neighbors." That is what the clerk does.

It is a good trait to think about business outside the office, but a bad one to talk about business after the office is locked. Perhaps this is why George M. Cohan carries his office in his hat, and I rather suspect he does not talk through it often.

When an executive does not reveal the inner workings of his firm you can safely guess that he is not merely a glorified clerk.

But if he says, "Perhaps I should not tell you this, but I am sure you can keep it," wager your last copper that he is either a clerk or wants you to think he has more responsibility than can be trusted to him safely.

PART III PROFITS FROM LESS FATIGUE



14. THE MENACE OF THE BIG DESK

It is said that late in the World War a new Admiral was given charge of some Washington offices which were filled with roll top desks. The red tape had a peculiar propensity for becoming tangled or lost in these particular offices. The first general order to the Admiral's subordinates was to remove the tops with their pigeon holes from all desks over the weekend — clean them out. Unpleasant tasks which had been neatly pigeon-holed out of sight and out of mind had to be uncovered and acted upon.

This is merely a minor menace of the big desk, which is apt to contain more unpleasant tasks which are being delayed than live records of daily accomplishments.

As a source of unnecessary fatigue, however, the big desk enters into an important role. As a temporary burying ground for unpleasant tasks it is a

source of mental fatigue which one executive calls a "feeling of impending doom." As a place where arms and hands and eyes have to be used, the big desk becomes a potent cause of actual physical fatigue.

Let one sit at his desk in the usual working position and mark an imaginary line by swinging each hand at an easy arm's length. The portions of the desk outside those boundaries are dangerous territory. (Soft chalk can be recommended to make the imaginary boundary visible.) Every article outside this effective working area causes unnecessary fatigue by demanding that the executive, or worker, stretch, or twist, or actually rise from his chair to reach it. Both time and energy are needlessly consumed.

Pen and ink equipment, reference works which are frequently consulted, memo pads, and other regularly used articles should be just inside this boundary. The family photographs, the vase of cut flowers, and the soul-stirring mottos should be outside this line. There is one office which trains its junior executives in effective working habits by telling them about these imaginary lines and then painting

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on the junior desks two white lines which are not imaginary. It is a serious breech of training rules to be caught with the pen set outside these lines or with a pair of gloves inside the lines. And when some unpleasant task is shoved to the very edge of these lines to be delayed, it is tragic, in more ways than one.

There is a small area of about one and a half square feet bounded by both of these lines. Within this area is found the most effective working space for the use of both hands. In shop operations at the assembly bench, for instance, this is where the work should be done. Tools, jigs, and all other incidentals should be uprooted from the window sill or the back edge of the work bench and brought as close to this double-bounded area as can be done reasonably.

These principles apply not only to the executive's desk and the worker's bench, but to factory planning as well. Shortly after the armistice a shoe factory saw its business expanding and purchased several vacant lots adjoining the existing plant upon which to erect new buildings. There was difficulty in se-

curing funds for the actual construction, however, and in desperation the management saw more orders coming in than could be filled.

A young assistant plant engineer who knew the principle of these lines of the effective working area studied one of the most congested departments and then drew up plans for a rearrangement of benches and machines. A crew of men worked with him day and night over a week-end cutting a foot off this row of workers' benches, two feet off another row. All were rearranged so that half of the trucks which had been used to transport materials from one side of the room to the other side were no longer needed. New benches were installed in the space gained.

On Monday morning one-third more people went to work in this department, and by Saturday noon they were turning out double the output with less fatigue.

The sequel to this incident is interesting: The vacant lots appreciated enough in value that when they were sold recently the profit more than paid for the cost of alterations in benches and layout. Plant ca-

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pacity had been doubled and fatigue lessened without any real expense to the firm.

Whether in the shop or the office, a big working surface invites fatigue. A big desk may be essential to impress visitors with the importance of the executive, but the executive who knows how to work uses only a small portion of the expanse of rare woods spread out before him.

15. PRODUCTIVE IDLENESS

RUST, CORROSION and taxes consume the idle plant.

Human machines are different. They are living, and idleness is essential for them to avoid the very things which eat away the idle plant.

Mere rest will prevent human rust and corrosion. Idleness beyond the limits of adequate rest has the queer power of yielding to the human mind great vistas of ideas and thoughts which refuse to appear under the pressure of daily work.

It is difficult for the executive to solve many of the major problems of his job if he does not have oc-

casional intervals for idleness — but that is getting a bit ahead of the story.

Last fall I spent some time at the home of the executive head of a large manufacturing concern. The sales manager in charge of marketing a new product they were introducing was also there. The chief executive was sending him away for a few days to be all alone on a yacht manned by a crew trained to make the idleness of their solitary passengers profound and productive.

"I am not running a sanitarium," he explained, but an idea hatchery."

There are hundreds of thousands of unused brain cells in each skull. We may picture some of these as overworked and tired out with the incessant pressure of daily routine. A rest brings these back into good working condition. We may picture some of the hundreds of thousands of brain cells which are not habitually used as eagerly waiting for a chance to get into action; idleness—not mere rest—gives them the chance for which they have been waiting.

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Idleness is not infallible, however, because there are many heads in which the numberless unused brain cells are not eagerly awaiting an opportunity to function. For such heads a period of luxuriant leisure is a test to see if they should be kept on the clock.

The pity is not the many heads incapable of having whole swarms of hitherto unused cells spring into action when idleness affords the opportunity; the real pity is the great hordes of heads chock full of cells but with no idleness from routine to let them jump into action. Work piled upon a small group of their fellows by routine details keeps the unused millions dormant; idleness puts many of these into the production line.

That is the new problem of unemployment which has been a shackle on executive development for decades.

Perhaps England's longer experience as an industrial people has developed in their executives obedience to an unwritten tradition which makes this unemployment less acute with them. The tremendous drive of the typical American executive is dif-

ficult to find among them, yet they have spread their industrial empire to every sea and every nation. They take innumerable vacations, come to the office scandalously late and irregularly, and drop everything for an apparently pointless tea. All of which obviously does not help them as detail workers, but which obviously does help them as creative directors by lessening the unemployment problem.

Vacations in congested centers are not as productive as those in quiet isolation where there is little to do except allow the brain cells to generate spontaneously their fancies and their sound ideas.

A short time ago an executive related to me how he first developed vision to see his job in long range perspective. He was hunting in Maine and was alone with his guide for the major portion of a week. In camp as well as on the trail, the guide was as solemn and uncommunicative as a pillar at the public library. During the day the executive tramped endlessly, and thought idly. At evening in camp he rested wearily stretched in front of a fire, and still thought idly. The first day, he said, he felt like shooting his Sphinx-

like guide. The second day, however, he discovered that it was easier to think idly after the unused brain cells had been warmed up to their new job. A week later he returned to his office with a new vision, and, almost literally, a new head.

It often requires a period of productive idleness rather than a fight talk or a threat of dismissal to bring the executive to his job with a cerebral punch. If the living machine is of executive quality it improves with occasional disuse which may tap great reserves of brain cells and powers if the idle time is rightly used.

16. Put the Other Half of the Force to Work

THE MAJORITY of American plants are manned by one-armed workers. The employment interviewer may see two fully developed arms on each applicant, but by the time the applicant reaches the desk or bench it is remarkable how one arm has disappeared.

Thirty-eight minor executives were recently observed in the simple act of taking a pencil from a

pocket, during which almost three-fourths of them lost an arm. They carried the pencil in a right pocket of their vests or coats, and had to use the left hand to remove the pencil and then transfer it to the writing hand. Scarcely one-fourth of this group carried a pencil in a left hand pocket where it could be grasped immediately by the hand that would use it.

Because of the arrangement of the working materials on their desks and within the desk drawers, almost the entire group became one-armed. Note paper and tabs and blank forms were kept in the right pedestal, whereas, if they had been stored in the left pedestal, the left hand could have done the extra work.

All possible work should be thrown on the unused hand! The left hand is not too awkward to lift clips, tabs or forms from a drawer. If the drawer contents are properly arranged the eyes need not be removed from the immediate work for the left hand to locate the form or supplies needed.

The left arm is as good as amputated if it is not used for these odd jobs for which the time of the right

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hand is too valuable to be wasted. This is a functional amputation which compensation insurance does not cover.

There are some places where the workers are actually given an extra arm. In one, where the employes have to use both hands in wrapping small parcels and one hand in checking items on a list, they have given the workers more arms and hands by first substituting an indelible pencil for the pen and inkwell they had previously used; later they began using a light rubber band to hold the pencil to the index finger while the parcel was being wrapped and thus prevented the annoying irritation of hunting for the pencil.

A worker on a sub-assembly job in a typewriter plant heard it stated in a lecture that all possible work should be thrown on the unused hand. Since he had a girl ready to go away to college, and since he was working on piece work, he rearranged his assembly lay-out to put the other half of him to work. He discovered that he had been using his left hand principally to keep the parts from slipping while they were

assembled. He screwed a piece of angle iron to his bench top to do this holding and with the aid of this simple home-made contrivance found that he could use both hands to put his daughter through school.

There is no danger of stammering when workers use both sides of their bodies in working. It used to be thought that to use the left hand for dextrous work would cause a speech disorder of this sort since the brain center on the right side of the brain which control speech is located exactly where the control of dextrous movements of the left hand would be localized. The facts are correct, but not dangerous as experience has shown — probably due to there also being actually millions of brain cells which are unused and which are eagerly waiting for some job of muscle co-ordination to be delegated to them.

A short week of awkwardness in bringing the unused hand into the picture is repaid by years of more skillful work. The typist has to use her left hand more than the right, due to the mechanical placement of letters on the keyboard. Typing speed is remarkable due to both halves of the worker being

used — and I have never heard one complain about typists suffering speech disorders. The awkward beginning period when dexterity is being trained into the ordinarily unused hand yields later dividends in greater skill.

Nine workers out of every ten could have their skill greatly strengthened if they would apply this secret of using both arms and hands. Not a five day week, but a four day week, would probably be a possibility if the great body of workers, from the chief's desk down through the organization, would use a week of putting the other hand to work to develop greater skill.

Let's add to our Great American Plague of Weeks a "Put-the-other-hand-to-work-week" so that our national skill can be practically doubled by developing one-sided men into two-sided men.

17. REFORMING BUSINESS FORMS

THE MODERN executive demands good forms and lots of them. In following his penchant for getting at facts in the management of his end of the company's affairs, just let him once discover that there is something knowable about a department or division and about which he does not receive a neatly designed report form at regular intervals — then you are likely to see immediate action, and lots of it until detailed forms have been prepared for reporting the average number of check marks made by each clerical worker using lead pencils, grade A, B, and C.

The demands for accurate facts in the management of business reached a high point only a few years ago, and has practically revolutionized executive thinking and approach. There are many indications, however, that the idea of getting the facts reported regularly on definite forms has run away with some executives who confuse a large number of forms with good management.

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The result in many sectors of the individual world is that departments are practically being "reported to death," as an office manager of the Corn Products Co. expressed it a few weeks ago. This office manager became somewhat suspicious of the real need of some of the reports he was asked to prepare for other executives, so he confidentially instructed some of his clerks not to send certain reports to some of the executives who had been in the habit of asking for numerous reports at stated times. This sensible trick resulted in demonstrating that a great many of the reports which had demanded considerable clerical time and expense were not being put to any use, unless we may call them useful for having made the executive's desk and wall look high powered!

The demand for facts in guiding the details of business is highly to be praised. But, like letter-heads, report forms seem to be one of the things over which executives quickly lose some of their common sense. The mania for reports, reports, and more reports reached such a stage in one company in the middle west that a few short years ago, when a vice

president in charge of sales was curious to know when out-going mail was posted and phoned the office manager to inquire about it, he started the ball rolling for a nice new report form.

The man in charge of sales simply wanted to find out on this particular day if a letter which had been collected from his desk had been posted, since he wanted to make an addition to the letter. But the office manager had worked in a printing shop in his early days and enjoyed working on type lay-outs, and he took the telephone call so seriously that he designed a clever little form and delegated a clerk to keep daily records of the hour, minute and second at which mail left and to see that the form was delivered to the desk of the casual inquirer every morning. The vice president's secretary requisitioned a special binder for these forms and they are kept neatly stored away in a binder with gold stamping, although he has less use for them than he has for the menu of last Wednesday on the Leviathan.

Like the Gaul of Caesar, forms have been divided into three classes: Those that are useful and interest-

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ing; those that are interesting but not useful; and those that are neither interesting nor useful. It is little short of appalling how time, energy and money can be wasted like the brooklet that ran on forever by continuing reports which were useful just once but which are now a matter of routine on a two color rag paper form. An attractive type arrangement with rulings in a vividly contrasting color may keep the forms in the second class, but that priceless asset is little excuse for continuing them.

When business tightened in 1920 one of the first things the Firestone Tire and Rubber Co. did to curtail expenses was to take a critical look at their forms. This resulted in the elimination of enough unnecessary forms to reduce their statistical department from 35 people to 3. This was guided by Mr. Firestone's estimate of the nature of management which he has expressed as follows:

"When one gets his business into too many departments with heads, those heads begin to departmentalize their own departments, and just as

naturally the head of a big department has to imitate the higher executive and do nothing but direct. Gradually an organization is worked up, second to none in its division of duties. It seems that a duty is never faced without dividing it and then inevitably the men begin writing letters to one another. I know of no better way of fooling oneself than writing interoffice communications and asking for reports. A man can keep himself busy that way all day long and completely satisfy his conscience that he is doing something worth while."

Now the policy in the Akron offices, where 2,000 office workers are employed, is to eliminate rather than introduce forms. Charts and forms by the hundreds have been abolished; and in Mr. Firestone's own words, "It takes a brave man to suggest a new form around our office."

The Great Northern Railway recently spent \$4,679 on a committee which eliminated, recast and reduced in size the three thousand-odd forms the railroad was using. This resulted in a saving of \$55,000 a year.

This is a recurrent saving repeating itself year after year — unless someone gets the bug for bigger and better forms, whereupon another committee may have to be convened. This saving includes just the paper and printing in the forms and does not cover the tremendous saving in direct labor expense that goes into filling out a form. This tremendous waste labor expense is illustrated by a sales form the Hupp Motor Corp. used for four or five years and just discontinued a few months ago. One man was kept busy on this one form most of his time. It showed the slightest details of model and wheel equipment and went to directors and several executives daily. A little thought revealed that only a small portion of the vast wealth of information carefully recorded on the form was used. The form was simplified to contain just the useful information, and the labor time was reduced to one hour.

Several of the criteria used by the Great Northern committee can be widely applied in other places, even in the household expense books which represent another element in this form craze.

Principle number one is to discover why the form started. That would have eliminated the report on the exact second at which the mail left.

Number two is to ascertain if the facts or figures on the form are duplicated elsewhere.

And, for number three, see if this form can be merged with another.

To save on printing cost, every form also should be looked over carefully to ascertain to how small a size it can be reduced, on how cheap a paper it can be printed, if it cannot be reported half as often as it now is, if plain black printing cannot take the place of colored rulings.

And, above all, there is the crucial question as to whether the business would suffer in the least if the form were entirely discontinued.

The committee of the Great Northern examined 3,679 forms. Slightly more than ten per cent were entirely eliminated forthwith. Twenty per cent more were eliminated by consolidation with others, and half were revised to take less space, less trouble in

filling in, and to be more satisfactory and useful in every respect.

The little detail of brightly colored ruling lines quickly runs into unnecessary expense of considerable magnitude and should be watched in this desirable reformation of forms. The Retail Credit Co. revised twenty of their forms and saved \$2,000 a year by leaving off the colored rulings.

One of the largest electrical concerns in the world pinches many pennies out of its forms which are used within the plant by running the printing clear to the edge of the form, and it saves still further by leaving off the name of the company. In contrast with this, just recently I saw a wonderful set of forms used by a small electrical contractor in a city in southern New York. I would be almost willing to wager that he used more forms than the large manufacturer does, and every one of his forms is on letter size paper, and at their top twenty-four square inches of paper is used to emblazon the name of his firm. This is impressive on first sight, but tremendously wasteful. And to cap matters, the contractor has fewer total

employes than the big concern has vice presidents. But he read an article once on forms in business and applied it with a vengeance. I am going to see that he gets a copy of this!

The demands of various governmental bureaus for reports on this-that-and-the-other have aided and abetted the craze for more forms and caused many concerns to spend more on clerical help to provide the information on prescribed forms than the chief of the bureau draws from the government treasury. Often part of this is a total loss to the firm since the statistics the government needs are not ones that help the firm in its internal affairs.

No longer is any business static. Constantly varying production and economic forces make it imperative for an intelligent management to know many details about the business. But forms alone will not keep the business going and can easily become a handicap. It is moved and seconded that every firm set aside the first week in March as a "Week for the Development of a Form to Eliminate Forms."

18. SIGNS OF LIFE ARE BAD SIGNS IN THE OFFICE

ONE OF THE WORST psychological mistakes in an office is for it to be plainly busy. It should be busy, of course, but not plainly busy. Activity should be made as inconspicuous as possible, for all visible activity is a potent distractor of workers' attention.

The physical lay-out of the offices rather than psychological tests is what is usually at fault. Take, for instance, the arrangement of private offices at the rear of the general office space. Most visitors are headed for the private offices, and in reaching them have to pass through the general office, distracting the attention of the majority of the desk workers. Visitors add a great deal to labor costs unless the offices where they call are so placed that the visitors are not seen by the general force.

Distractions of attention are more potent in lowering the productivity of mental workers than machine workers. It takes half an hour or more for a mental worker to get warmed up to his task and to get his brain cells functioning properly. With the distraction

of his attention he practically has to start all over again.

Movements always gain attention. That is why the advertising department wants electric signs that flash or have a streak of light chase itself around the border and why they want illustrations with people doing things in them. The aim of the office should be exactly the reverse. Movement is necessary for much of the work, but this movement should be concealed as much as possible by a skillful arrangement.

Where several workers have to consult ledgers from time to time, these ledgers should be placed back of all the desks; and desks for those who have to consult the ledgers should be in the last row. With such an arrangement, the workers are saved steps when they get up to look into the books; and there is the added advantage that large numbers of fellow workers are not distracted. This should be considered, also, in placing files that large numbers of workers use.

Telephone directories should be at each desk phone, not only to save time, but also to save distractions. The use of pencil sharpeners distracts by

the noise as well as by the worker's walking to the edge or center of the room to use them. The best plan in this respect is to have the office boy collect pencils each noon and sharpen them, leaving two freshly sharpened pencils on each desk ready for the start of work each morning and afternoon. If the boy is properly trained in the use of the sharpener, a great many inches of pencils will be saved each month.

Intermittent or unexpected noises give workers a mild fright in addition to distracting their attention. A siren signal is especially evil in this respect, but even the isolated telephone bell is unpsychological also. The telephone bells should be individually tuned and muffled by the use of rubber bands or cardboards inserted behind the bell.

When individual adding machines or calculators are used on desks, the distracting noise from them should be lessened by the use of padding under them, which will prevent to a large extent the desk from amplifying their noise. A further muffling can be achieved by building a neat hood out of some sound absorbing ma-

terial. These are in use in the Colgate psychological laboratory and are tremendously effective.

When the space is divided into smaller areas by the use of partitions which are two-thirds glass, some distracting forces have been isolated; but in case the glass is clear, more forces have been added, due to the predominant curiosity of human beings making them want to see what is going on in the places where they have no business looking. There is no doubt but that a frosted or milk or ribbed glass should be used in these partitions in place of the more commonly used clear glass. The clear glass is probably used because it is cheaper, and many think it has a moral influence in keeping people busy since they can be seen. If time studies have been made or work budgets established — as they should be anyway — there need be no fear of undesirable idleness.

Pneumatic tubes are a double distraction due to sudden noise and movement. They should be shielded at their outlet by a sound absorbing screen.

In some metropolitan offices the office forces are arriving on a staggered schedule. This has been neces-

sary to relieve traffic congestion, and it can be a help within the office itself by having the mail openers arrive earlier. Precautions must be taken, however, that the arrival of a second group of workers half an hour after the first does not cause much distraction.

Work places which face outdoors where interesting things may be observed, may make the worker like his job; but they cut into output greatly. A window should never be faced by a worker, since it adds to eye fatigue to face the light; — but this is in addition to the distraction it causes.

Where a long narrow office is used it is often possible to place the desks facing opposite walls, thus avoiding distraction due to one employe watching the other. Desks placed back to back so that workers face each other will save floor space but will reduce unit output due to distraction, except in instances of two man jobs.

Checking operations which require two employes should have a special noise insulated corner or room which will prevent the calling of numbers and names from disturbing a number of people in the office.

While all workers should be shielded from distractions as much as possible, those engaged in executive work should be given especial consideration, as distractions probably interfere more with original head work than with mere routine work.

19. ONE REASON WHY MUSSOLINI ACCOM-PLISHES

IL Duce sticks to his job sixteen hours each day—yet he is striving to reduce the working hours of Italian workers. But don't pity Mussolini. The sixteen hours of his working day are probably crowded full of decisions and action and, I imagine, are accompanied by much hustle.

Is he a superman to be able to survive this ordeal of long hours? Or does he have some secret formula which makes it possible for him to do two days work in one? I think he has a secret which psychologists discovered some years ago.

We must look into the dictionary to get insight into this secret. There we find a vacation defined as a change of occupation. It is not necessary to halt

activities to rest; a sagacious change may leave the body rested although it has been productive and has made every second profitable.

The meter assembler who all day has been using delicate hand and finger muscles to manipulate the tweezers with which he assembles, grumbles after the shop has been closed for five hours because falling darkness makes him leave his garden. His job had tired fingers and eyes until the quality of his bench work doubtless would have suffered had he remained in the plant an hour longer. The whole man, however, was not tired.

Most industrial tasks tire out only one-fourth or one-hundredth of the man. When fatigue sets in and output and quality fall off and accidents stalk in his shadow, it is only a small part of the man that is tired. There are hundreds of muscles and millions of nerve cells that are still as fresh as when the sun awoke him in the morning.

Mussolini has a varied day. Every minute he is on the job, but this hour's job is not the same as the last hour's and the next hour may see still another

change. Nerve and sinew tired the first hour are rested the second while he changes his occupation slightly to exercise another group.

Some executives who are unable to organize their work would appear ideal for long hours, until second glance, when we discover that they tire themselves out emotionally through indecision. Effort-consuming decisions which should be limited to matters of policy, they dissipate on routine detail. It takes fully half an hour to get warmed-up mentally for a task of executive calibre, and to shift at short intervals is to curtail work before the peak of accomplishment is reached. Stick two hours at the desk before you phone. Do all your phoning at one sitting.

Executive conferences should be arranged so that either the day is started off with them, or two hours of concentrated work is rounded up with a conference. To hold the conference thirty minutes after opening time requires that one warming-up period is practically lost.

Appointments in the office should be scheduled with this Mussolini-making factor in mind.

A departmental manager in a large bank recently put this one secret of *Il Duce's* phenomenal powers to work with his clerks. A psychologist had told him that his clerks were too specialized. The manager retained the specialization but saw that each clerk was gradually trained in the specialty of the others who handled preceding or succeeding details in the transactions of which they had charge. Then he started rotating his clerks every half hour, like a predetermined game of progressive bridge.

Playing with dynamite? Perhaps, but within a few weeks that group of clerks was leaving the portals of the bank, all their work cleared away, more than an hour earlier than they had been able to do by working hard at a single process all day long. The change every half hour gave a chance for some brain cells to rest, and with less consequent fatigue they ate up their work and enjoyed the extra hour. And when one clerk was kept from work by illness the routine was not held up, for every other clerk in the department was now qualified to do the absent one's work. Since each clerk now knew more processes, he was

better equipped for any job which attracted his fancy elsewhere.

"The more techniques mastered, the better the man," Yandell Henderson told me while teaching me some physiological measurements. To which Mussolini might add, "The more techniques used, the more rested the man."

20. CAN THE OFFICE BOY BUILD PROFITS?

A FEW WEEKS AGO I had a long session with an eminent management engineer who is now specializing in installing profit-sharing schemes in many of the largest plants and offices in the industrial east. He has his attention fixed upon the top strata of executives, and his profit-sharing installations are practically limited to this group. Typists, routine workers and the general "rank and file" in the plant are neglected in his thinking.

"They cannot contribute to profits," he says in dismissing them from consideration. But he also has difficulty in discovering that any of the executives ex-

cept those in the sales divisions can make profits for the company. I should like to tell him about a small pharmical manufacturer who would not have made a profit the last fiscal year if it had not been for the canny buying of his one-man purchasing department. Of course, when a company depends upon its purchasing department's making a large paper profit, which though it is on paper, is to the company very real and satisfying, it begins to have difficulty with its bankers, and rightly so. But here is an outstanding example where it was not the sales force but the unpopular purchasing agent that made the profits. It is needless to add that this year the purchasing agent is now on the list for profit-sharing.

A stimulating way to distinguish whether a firm has a traditional or a scientific management is to discern where they think they make their profits. Traditional management assumes that all the profit is to be found in the mark-up above manufacturing or purchase cost, which indicates the price the customer pays. The old cross-roads grocery emporium is typical of the extreme of traditional management. The

fundamental difference between the cross roads loafers' hang out and the modern highly efficient and profitable chain grocery is not in the number of flies crawling over the head of cheese which is displayed to attract customers, but the crucial difference is rather to be found in the chain store management's having discovered that the mark-up does not indicate the places where profit can be made. This is why many firms with a low mark-up are able to yield a larger net profit than others with twice the final mark-up.

Looking for profits in the sales blinds management to the larger profits that can be mined in hundreds of places in their business.

Somewhere I have a carbon copy of a speech delivered by some executive in which he states that the real profits of a business are to be discovered in the multitude of departmental savings which it is up to the management to discover. I am sorry that I could not locate this speech in order to obtain the exact wording which was highly effective, and also that due credit might be given the man from whom I have appropriated this idea. But perhaps it will be remem-

bered more effectively by the readers of the essay as the contribution of an unknown executive to the readers' thought about their job profits.

The sales force and a few top executives create rather obvious profits that any competitor can duplicate. But no competitor on earth can keep up to the lead of the company where every minor executive and routine office or bench worker is alert to make his contribution to the total profits of the concern.

There is one railroad, for instance, which uses 60,000 typewriter ribbons a year — and this is not a particularly large railroad either. A few years ago a stenographer was noticed taking the ribbon out of her typewriter during a lull in work. Then she carefully reversed the ribbon so that the unused half would be used. By doing this she actually doubled the life of the ribbon. (No typist will use her machine with the altered touch brought about by shifting the ribbon lever in such a way that the guide brings the unused half of the ribbon up high enough to be used for the impressions.) This stenographer's practice is now

standard with the company, with the result that there has been a very real saving in this item.

But that is not all—the office boy enters. A rickety typewriter at home is one of his cherished possessions. He salvages ribbons which have been turned into the storeroom in exchange for new ribbons.

"Why do you bother us for these worn out ribbons," he is asked by a clerk in the storeroom.

"They aren't worn out. Look! The cloth of this one is not worn at all. I put a drop of typewriter oil on it and let it soak at home until it is even, and then sister and I can use it for two months just like a new one."

That is also standard practice now. The ribbons are left on the machines and the oil applied at Saturday noon for them to rejuvenate over the week end.

20,000,000 sheets of carbon paper had also been on the annual list of this transportation company. That is, until an office boy discovered that its life could be

almost doubled by placing it beside a radiator when it began to show wear. The heat softened the wax which sought its own level and filled in the worn places.

I imagine this was the traditional freckle-faced office boy who was as fresh as the first day of real spring weather. At any rate, any traditional office boy has a lot of ingenious activity going on in his head which can add to the profits of his employer. By the time this boy becomes a full-fledged clerk, however, I am afraid he will be keeping his ingenuity to himself, since it undoubtedly will have been thoroughly impressed upon him by that time that only the sales force and the department heads can make profits for the company.

There is no department head, no matter how capable he is, who can discover all the avenues through which his department's share of the profits can be increased. For one thing, his daily experience is not as versatile as the total experience of his routine workers; and it is out of these experiences that concrete and practical profit-savings must grow. The de-

partment head can make the profits largely in theory only.

It was not a department head, for instance, who hit upon the plan of sawing up the handles of discarded brooms to make staffs for signal flags. Or to cut the expense for circular erasers to one-third the previous figure by bending back the metal shield after the rubber had been worn down to this level. The executive just does not have the experience and the time to ferret out all details of this sort. If he does, he soon becomes a poor executive. But since details are what contribute so greatly to the total profits, they have to be watched. A philosophy that only a few executives can build profits thwarts the natural trends in many routine workers to look for these hidden sores which sap the profit in the sales department's markup.

"An executive cannot grandly dismiss details," says Harvey S. Firestone. "Business is made up of details, and I notice that the chief executive who dismisses them is quite as likely to dismiss his business."

It is probable that there is some untaken profit in each detail in business. I suspect that practically every article now manufactured could be sold at half its present price if the executives could key their workers up to the point where they were alert to uncover these hidden profits. In fact, I would wager that once the office boys in a plant were keyed up to the proper pitch they could add more to the company profits than the high salaried bunch of experts with seven differently colored pencils that staff the efficiency or planning department.

But who would get keyed up to this phase of his job if he knew that others were expected to do this?

21. WHERE YOU CAN GET MORE IDEAS

"I HAVE always invested in men," says an acquaintance who has been unusually successful in his investments.

"What is in the financial statement interests me less than does the brains of the men in active charge of the concern. I have never invested a dollar until

after a thorough study of the intelligence of the management. My money as always been placed with the company that has *ideas*, and not on patents or monopolies."

A change of management in most instances means merely getting some new ideas into the affairs. But this is a confidence-dispelling way of getting new ideas.

One man probably never has had enough ideas to run a corner grocery store. He has had to draw on other people's ideas. That is why he looks forward to the visits of a few salesmen who tell him of successful ideas in other corner groceries before trying to sell stock for his shelves. He also looks forward with the same zest to reading some of the house organs he receives. He reads those with ideas he can use, in case he has business intelligence worth investing in; otherwise he looks at the pictures and wonders what the house is trying to slip over on him.

There is an outstanding industrialist whose face and name are familiar to every reader. He has introduced ideas which have practically revolutionized

industry. Where did he get them? He did not lie awake nights trying to think them up; he did not call in expensive consultants. He got them this way:

In walking through one of his plants he saw a large pile of crate wood being burned. Waste. At once an order went to all his superintendents that all wood coming into the plants should be burned under the boilers. Still more wasteful, — as one of his superintendents found by records of the cost of pulling nails and preparing the scrap wood for the furnaces. But when the superintendent submitted this cost analysis to his employer it was not even acknowledged.

A few weeks later the owner was going through the plant of this superintendent when he came to the crew of men preparing scrap wood for the furnaces.

"The labor cost makes this more expensive than coal," said the superintendent. "I don't think it is wise to continue burning the scrap."

"I do," said his employer. "There are some ideas in those boards that some one will fathom some day. Would you like to pull nails all day long from those boards?"

"Of course not," was the superintendent's reply.

"Neither do those workers," countered his employer. "If you put an intelligent man on that crew, pretty soon he will become so disgusted with his job that he will find a better way to do it."

The next day a young college graduate was placed on the crew. His first idea was that it was a great way to treat an engineer. But within a week he had another idea: Why not a big sausage grinder to crush the wood, magnets to lift metal out of the crushed fibres? And why not blow it under the boilers in an almost explosive dust mixture?

That is what they are doing now, and it is one of the most paying ideas in the chain of plants.

This captain of industry is a veritable genius at getting ideas, but from others. Workers to him are not hands, but heads. Recognition, responsibility, and publicity are given his men who give birth to useful ideas. He is always on the look-out for ideas from the workers, and they know it. He will not tolerate a supervisor who is too busy to listen to the new ideas of a bench hand.

Another half-owner of a plant in a small town gets his foremen together twice a month. He tries to get them to think about their jobs, and to develop some new ideas about manufacturing. A purely chance remark he made at one meeting set the wheels to work in one foreman's head, and they ground out a new idea at which he himself had to laugh; but they found it would shave costs more than anything they had done in five years and that it would give such an edge on competition that the small village would not have to worry about bread and butter.

The isolated executive, trusting to his head alone, is a figure of the past. Competition is too swift for him now. Even the genius cannot get ideas fast enough and practical enough to keep in the race long. The soundest ideas are usually those which come up the line from the man at the bench.

The machines for developing the ideas are at the benches. If the ideas do not come on up through the lines there is something wrong that cannot long stay wrong under present-day conditions.

Is the line clogged? Here is a simple way of ascertaining:

How many hands do you employ? How many heads do you employ along with the hands?

Many workers are more headless than the headless horseman that chased Ichabod Crane. But they are usually headless because the management unintentionally keeps them so.

Try putting the heads back on your workers!

22. INTEREST IN THE JOB

THE WISE EMPLOYER strives to have heads rather than hands on the job. The wisest employer has heart as well as heads on the job.

The worker who is of most value works with his hands and head, and from his heart.

The spectre of prison labor competition should not cause any apprehension — prison labor is always expensive because the worker interest is close to the zero point. At the customary prison wage of twenty

cents a day, it is still expensive labor. It is not the low wage that makes convict labor extravagant, for wage money is not the principal avenue through which interest is aroused.

While a starvation wage can quickly kill worker interest, a foolhardy extravagance in wage will never generate worker interest if the basic essential of a feeling of worthwhileness is missing from the daily task. The worker must feel that the product, the firm, his processes and his personality are worth while.

Interest in the job gains strength as the worker knows more about the company and its product. The heart is put into the daily routine when the worker knows where the product is used, how new customers are secured, what processes take place in other departments, why the plant is not located in Seattle, who made the basic inventions, when the office force works overtime. The Ohio Brass Company answers these and many other questions by taking the workers through all departments on company time each fall.

Discouragement thwarts the development of interest. Severe criticism yields the rankest form of discouragement. Unwarranted praise increases output through added interest, but a price is paid in quality. Warranted praise recently increased the output of a group of workers by 79% while discouraging criticism reduced the output of a group of similar workers by 6%. Praise is unwarranted when it leaves the worker with the idea that he is at the peak of perfection and can never be better. Criticism is unwarranted when it conveys to the worker the idea that he is at the bottom of the slough of imperfection and can never be much better.

Twenty years ago Rose L. Fritz typed 82 correct words per minute and earned the world's championship. Her trainer encouraged her to do better, although Miss Fritz thought perhaps she had reached the top limit of human speed. Through the stimulating encouragement of Mr. Kimball she raised her accomplishment to 95 words two years later.

The newcomer to the works is entering with great anticipation. If his first tasks are such that he is

made to appear a bungling fool his interest is immediately deflated and may never again rise to a level that will give him a personal stimulus or make him a firm success. First jobs should be planned so that the newcomer will succeed at them and his interest will be sustained to carry him through difficult tasks later.

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The man working under an enthusiastic supervisor has greater heart for his tasks. The executive without enthusiasms for everything should be kept in a staff position where he will not be so likely to dampen the interests of those at the bench. The line executive should literally ooze enthusiasm in every word, in each gesture, and in all his ideas.

. . . .

The man with a goal, with a life plan, is interested in every phase of life. The goal may be to become works manager, to retire at sixty, to own a home, to build a summer cottage. Every interviewer should give preference to applicants with a goal projected into the future; it lends a dynamic drive of remote purpose to the bench tasks which helps interest carry on beyond the corners of the bench.

The executive should stimulate some remote goal in each man under him so that the job horizon is widened into a scene of something more than bread and butter.

The directors should provide home ownership helps, educational aid for children and promotional charts to help the men organize their lives.

Golf is gripping in interest because there is always the past score to be bettered. The sporting element of taking the job as a game with a previous score to be bettered keeps the heart on the job. Foremen and foreladies with Cadbury Brothers, chocolate manufacturers in England, show each worker charts of their individual production scores at regular intervals. This is neither for unwarranted praise or severe criticism; it is to keep before them a past score to better. In a recent experiment upon this elsewhere, one worker was accidentally shown the wrong chart, which contained a record much higher than his own

— but this so encouraged his interest that he actually

bettered this falsely high record in the following period!

The interests of an adult man have practically all been acquired. Others can be acquired, but it is difficult to alter the ones he already cherishes. The interests of the applicant should be gauged; those of the employe should be cultivated. Excellent aptitude for a task without a marked attitude of interest in the task gives the same results as no aptitude.

There is no job that is uninteresting, but there may be uninterested people on many jobs. The fault lies not with job specialization; rather it is to be found in a lack of manpower engineering.

23. CUT NOISE OUT OF THE OVERHEAD

THERE IS a very important engineering rating which is too commonly overlooked when a new machine is bought. What is its *noise coefficient*?

When a new building is purchased, some overhead calculations should be made on the *noise absorption* of the structure.

Noise is a very common thing in work places, and an expensive matter. It cuts into output at times by as much as thirty per cent. Experiments indicate that mental work is cut down more than repetitive manual work by the presence of noise of average industrial intensity.

We have found no indications that workers "get used to noise" in the sense that their output goes to the same level it would if the noise were absorbed. They may get so that they ignore its presence, just as a chemist ignores the smells of hydrogen sulphide. But noise remains to affect their output, just as the chemicals still affect the nose of the chemist.

Most executives have two misconceptions about noise in industry. The first, which we have just mentioned, is the ill-founded belief that, after all, noise does not affect production. The second misconception is that noise is a necessary evil and that there is no scientific basis for controlling or absorbing noise.

Noise does cost, and most of it can be controlled for all practical purposes. It is only within the last twenty years, however, that acoustical control has been on a scientific basis. There is still a great deal of quackery in the field, and there are many unjustified claims by manufacturers. To control noises so that a public auditorium has perfect acoustics is a difficult but not impossible problem. To make a factory room or office quieter is not such a difficult task; but it is still beset with many mistakes, as the experience of almost any plant engineer will show.

Plant noises are a two-fold menace. Not only are they a hazard in their immediate locality, but also they extend to other parts of the plant at a speed of 1088 feet per second. Most executives, for instance,

are quiet; but most executive offices are noisy on account of the infiltration of noise from other parts of the works. This is true even for the office in a business section entirely removed from the works where traffic noises pour in through open windows, or — strange as it may seem — through minute crevices around the windows.

Noises have to be attacked from two fronts. Much noise can be conquered at its source. Noiseless gears, chain belts and canvas-tired truck wheels will engineer more quiet work places. Heavy and noisy machinery which makes the building vibrate — a form of noise transmission not mentioned previously — can be muffled somewhat by mounting it on a base of resilient sound absorbing material.

Some machines, by reason of the nature of the work they do, cannot be quieted as readily. Punch presses, saws, rivetting operations and even address-ographing are intrinsically noisy by the very nature of the operation itself. Such machines should be isolated, so far as possible, to keep their noises confined and absorbed within a limited area. I was in a

plant a short while ago where a single rivetting machine disturbed a great area by being placed in an "L" shaped room so that its terrific noise was equally distributed throughout all the room. In this particular large room the noise intensity was at 85 units, due almost entirely to this one machine. How great this intensity is may be realized from the fact that if you were to stand beside an eight cylinder air plane engine which was running at $\frac{3}{4}$ speed and without a muffler you would hear about the same intensity.

The second, and apparently more hopeful, front on which noise has to be attacked, is by absorbing it. Ordinary wall surfaces build up noise intensities of machinery by prolonging the reflection of the noise from wall to wall until, after innumerable reflections, it is at last too faint to be heard.

If you have a plastered office, for instance, with 18 foot ceilings and a floor space roughly 30 by 40, you will be able to hear a handclap for five seconds after the hands have been struck together. This is the period of reverberation. The machines in such a room, which is typical of most rooms, will sound

much noisier than they actually are, because the reverberation keeps the sound alive for several seconds.

To lower the reverberation period it is necessary to have a wall surface which will absorb the sound energy by changing it into heat. (I told this to a plant engineer who was a typical Scotchman and who seemed pleased by the idea of heating the plant by noise! Of course, the heat generated is minute and only of theoretical importance.)

Common plaster absorbs scarcely two per cent of the noise which strikes it. Consequently, a plastered room is as noisy as can be. Fitting the office with extra heavy oriental rugs will quiet the room, as such rugs absorb around 29 per cent of the noise striking them. There are less expensive ways, and more effective ways, of absorbing noise.

The old favorite of stretching wires to "cut up the sound" is entirely without justification. There is no evidence either that wires better carrying powers of auditoriums or that they make work places more quiet.

The only solution of the problem of industrial noise is to choke off all possible noises at the sources and to absorb the remainder of them by wall design. Laboratory records indicate that if this is not done you will have to include noise that is above 40 units intensity in your cost accounting.

Surveys made of streets, offices and work places in Chicago, Boston and New York reveal that in practically every working environment the intensities range from 50 to 85 units. In a few places we have run across offices which have been designed by the architect to afford a maximum of sound absorption in the walls. In some of these, eight typewriters in full action yielded only 35 noise units.

In an auditorium where speakers are to be heard or concerts given it is possible to have too much absorption, especially with an audience, since each person gives 4.7 absorption units. In factory and office quieting, however, there is no similar danger.

Noise absorption coefficients, per square foot of material:

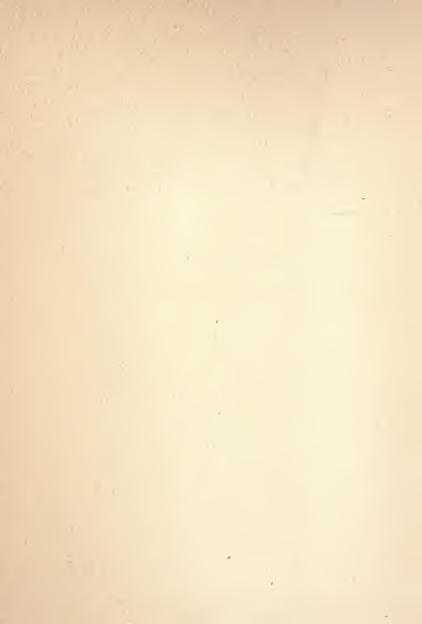
open window	1.00
acousticelotex, $1\frac{1}{2}$ " thick	.70
akoustolith (artificial stone)	.36
brick wall, 18" thick	.032
carpet rugs	.20
concrete	.015
cork tile	.03
cretonne cloth	.15
 flax, I" thick	.55
glass	.027
hairfelt, 2" thick with painted mem-	
brane	.4060
insulate, ½" thick	.31
linoleum	.03
plaster	.03
varnished wood	.03

An individual person gives an absorption of 4.7.

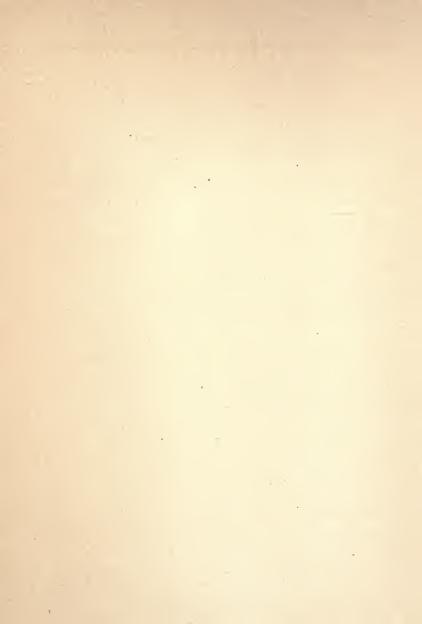
How effective absorption is can be shown by the special test chamber used for some of the experiments in the Colgate laboratory. This is a cubical room, ten feet in each dimension. The walls are of ordinary plaster, but in order to experiment under quieter conditions demountable panels of acousticelotex 1' x 10' have been built. The period of reverberation for the

room when the plaster is uncovered by the panels is in excess of 2 seconds. When the panels of absorbing material are in place this reverberation period is cut down to 0.12 seconds.

If you can absorb some of the plant noise, you will also absorb some of the unseen overhead.



PART IV PROFITS FROM PERSONAL DEVELOPMENT



24. THE BISHOPS' ERROR

"When all executives read all the business magazines and get all the ideas out of them," a facetious friend said to me, "competition will be at a standstill. Like the old one-horse shay, every business will be equally strong in management and policies, and where will they get?"

Well, some of them will get much further than others. Such a battle of irresistible forces and immovable objects my friend half-heartedly believes in. The grave weakness in his logic is that he overlooks the human nature of executives.

If executives were machines the dilemma he pictures might gradually draw us into its grasp. But executives are human; and even when they do get all the ideas from all the business magazines and courses and services, there will be a sizable per cent of executives still running their businesses just as they have always run them.

They may get all the ideas, but unfortunately they will not use in their work tomorrow all of these ideas that could be applied.

Men are fettered by habits — not smoking and drinking and swearing, but really serious habits in thinking and doing; and these they will not change because they look upon them not as habits but as "judgment." An acquaintance, who asked me not to mention his name but who is in close touch with management throughout the country, is firmly convinced that New England is not handicapped by the distance from raw products or wage scales, but by adhering too closely to tradition in management details. If he is right, it is a handicap of habit. This handicap of habit will keep many from profiting by all the ideas from all sources.

Then there is the complicating element of what I like to call the Bishops' Error. Not that Bishops are especially weak in this respect, but because of the story which will not let me forget this factor. It is said that a meeting of Bishops was called to draft resolutions to be presented to Her Majesty. When

the committee reported and read their preamble: "We, Her Majesty's Bishops, humbly aware of our imperfections . . . ," they were abruptly halted by the senior Bishop, who maintained that he was aware of imperfections in Bishop Willoughby, in Bishop Nethers and in many others, but was aware of none in himself. The assembly agreed with him to a man, and the committee was immediately sent out to redraft the resolution.

They returned with one which was adopted, so the story says, with great enthusiasm. It began: "We, Her Majesty's Bishops, humbly aware of each other's imperfections . . ."

This is the Bishops' Error.

It is easy to see how a new idea may have worked for someone else, but the tyrant habit is reinforced by the Bishops' Error; and we fail to see if there may be a germ for our company in the idea. "It was a workable idea for them;" we say, "but, on the other hand, our case . . ."

"But on the other hand, our case" has caused the loss of millions of dollars of potential earnings. "Yes,

but " is its twin, sired by the tyrant habit and damed by the Bishops' Error.

Some time ago I talked to a vice president in charge of production much as I have just been talking to you. He was not a "Yes-but-er"; some of his superintendents were, and that worried him. Now he has under the glass of his desk an unusual document. It is placed so that those sitting in conference across his desk can see it plainly. Pasted on a sheet of paper are news items from cities where they maintain plants which tell about local bankruptcies. Written in large blue pencil at the top of the assortment of clippings is "But on the other hand, our case." Across the bottom in larger and red letters is "Yes, but — ."

New ideas that have been tried are absolutely necessary for an incessantly changing competition. It is not sufficient to become reconciled to something novel *after* a competitor has demonstrated that it will work — that simply takes one out of competition and makes him a hanger-on.

There has never been a time when sound and progressive management should be so easy as the pres-

ent, for the executive of today is exposed through the trade press to sufficient ideas—provided he is executive enough to see how he can use them for his company. Yet every consulting management engineer will tell you that finding a solution for industrial difficulties, hard as it may be at times, is as nothing when contrasted with the task of getting executives to follow and use the new. The "Yes, but" which greets the consultant's outline suggests that he was called in to praise rather than strengthen management.

The widespread tragedy of modern business is that for each man who can develop and test a new idea there are a hundred with the disease of "Yes-butitis" whose minds are fallow to change.

25. LIFTING BUSINESS WORRIES

Worry saps ability and limits capacity. I believe that only human beings worry, and evidently it is a human characteristic which should wisely be avoided. A serious concern for the affairs of life and business is a close and desirable mental relative of worry. But when this desirable psychological condition becomes deep-seated or exaggerated in strength the individual at once has his capacity for accomplishment greatly limited.

"Worry is interest paid on trouble before it is due," commented Lord Dewar, the sagacious and still humorous Scottish Peer who would not worry about worry.

But some trouble seems to be inevitable. The elder Rockefeller has confessed that devastating fires which destroyed many of his refineries and other oil producing properties during the infancy of his business development almost caused him to quit the field rather than handicap himself with the incessant worries they precipitated.

There is no use trying to laugh off worries from such causes. Only the foolhardy would try to do so. Worry should be transformed not into a lackadaisical attitude but rather into action to remove the legitimate cause of the worry.

A penny-pinching president of a small but aggressively successful manufacturing concern related to me recently how he had been unable to get a real vacation for years on account of what amounted to a moderate worry about the affairs of the plant while he was away. Even two-day business trips saw his serious concern being transformed into worry on the second day of his absence. Soon he began to show the ill results of this state.

His wife hit upon the solution to his worry by insisting that he engage an unusually capable assistant. She must have used high pressure salesmanship, for his competitors are still talking about the exceptional salary he pays his assistant; but his wife would give him no rest until he had agreed to engage a man fully capable as he, so that he would not have the least cause for concern about the works during his absence.

"You'd worry about the pennies, anyway," I heard she told him, "so there is no use in being a tightwad in this case also and worrying about an incompetent assistant." Cheap help is expensive in worry.

I am a firm believer in the great psychological value of adequate insurance of every sort. It is good business to protect all business assets and risks. It is good personal psychology to protect them to the limit so that mental facilities can be used for purposes more constructive than fretting. Incidentally, such a practice of being even more than adequately insured in every way removes the annoyance of having a salesman of some-insurance-or-another pop up to play golf with you or to disturb the pleasures of a bridge game by subtly inquiring if you are adequately protected!

As bad as those who worry unnecessarily about their health are those who neglect their health. Thoroughgoing examinations by exceptionally competent physicians several times a year not only keeps the executive force in better condition for fighting competition on account of good physical well-being, but also

relieves many worries. I had a colleague in the west, for instance, who had worried for years about a bad heart. He had not been told by a physician that his heart was bad, but maintained that some times it "cut up terrible and could actually be heard when it was beating." A medical examination after five years of this sort of worry revealed that there was not the least suggestion of organic heart trouble, and that he was merely hearing what anyone can if he only listens to his heart beats in a quiet room.

Ridicule and public opinion are the source of much serious worry. Both can be avoided by dress, bearing and dealings being such that the opinions of others will be no cause for worry.

Shoe-string undertakings have smothered great amounts of ability under a wet blanket of worry. Only a supreme optimist is warranted in going into a shoe-string enterprise, because the ordinary run of men are not capable of withstanding the strain of financial worries. Trying to meet next week's note at the bank is more likely to precipitate unproductive worry than to generate profit-making ideas which are

really needed to meet the obligation. The unemotional banker who refused a loan may merit a letter of thanks for preventing handicapping worries six months later.

Worry appears to be contagious in many instances. The executive who is inclined to have a day of blues every so often should stay away from the office on these days. Otherwise he may set up a contagious depression in his associates. At any event he will not be worth a great deal at the office that day due to the way in which worry and depression slow up practically all thinking processes. The cheerful thinker is the fast thinker, the moody thinker is the slow thinker.

There are many men and women who are ordinarily optimistic and cheerful but who, for inner reasons which they can neither understand nor explain, have a spell of blues and worries which may last a day, or may last a week. That helps explain how some who can produce executive results most of the time seem literally to be no good on some occasions. The chief executive should look for these trends in his

Profits from Personal Development subordinates and attempt to ferret out the cause for worry.

There is a small percentage of mankind that actually enjoys worrying. This verges on the abnormal. The excessive worry is not, however, the cause of the impending abnormality but a symptom that it is approaching. These "Aunty Fearful's" are not confined to the fair sex only. I know of two important executives — one in Ohio and one in Massachusetts - who recently had to be relieved of their duties because worry became morbid with them. It was not the lack of insurance or favorable public opinion that caused them to crack; it was inner developments which may have been started long before they ever heard of their companies. There was nothing their companies could have provided to forestall the unfortunate development, unless it may have been a psychiatric advisor on their health staff, such as R. H. Macy & Co. has had for the past few years.

The multitude of petty inefficiencies caused by avoidable worries which have a definitely ascertainable cause should be attacked by every executive. The

time spent in trying to design a new letter head could be much better invested by making a worry analysis of policies. What policies are being followed that may cause worry? What steps can be taken to modify these into worry-free policies? What fellow executives are getting into the worry habit? What steps can be taken to remove the conditions which cause this sapping of their abilities?

A special period should be scheduled four times each year on the executive's calendar for a worry inventory. All worry items carried in stock or in process should be forthwith relegated to the scrap pile as soon as they are inventoried.

26. WERE YOU BORN TO BE SUCCESSFUL?

Is success determined by heredity? The answer is "Yes and no!"

For a few, success is an accident in which heredity and chance events play the principal roles. The more inspiring successes, however, are those due to individual determination, skillful planning and well directed efforts.

Brute intelligence has much to do with success, and brute intelligence is inborn. Education, study, determination cannot increase intelligence.

The vital question is not how much intelligence you have. That is important to know in working out a successful life plan, but it is more vital to know what use you make of your intelligence. It is not how much intelligence, but how effectively intelligence is used which boosts the individual.

Knowledge, whether gained from reading or from experience, strengthens effective intelligence by providing mental blocks and tackles. It is much like a crowbar increasing the effectiveness of physical strength.

There are the two brothers Ernest and George. Ernest, the older, is decidedly the more intelligent. But George, less intelligent and younger, graduated from Harvard law school and is in a responsible and lucrative position now. Ernest has never found how or why to put his intelligence to work. George is going up, while Ernest has difficulty holding his own.

When some people say they were not born to be successful, what they are really admitting is that they don't have the ambition to try to be all that they can be. They are waiting for opportunity to knock, when they have not even invited her to visit their street.

Some who are inviting opportunity are looking for her in the wrong places. Knowledge about your job in all its ramifications is a fair invitation; the invitation hardest for opportunity to decline comes from the one who is studying himself as well as his job. That is where most fall down; it is easier to know the hard spots in one's job than it is to know one's own hard and soft spots — and sometimes less embarrassing.

A woman leader in the industrial field was talking these points over with me some time ago when she used her own life as an illustration of this point. She has been eminently successful in every way — fullness of living, financial prestige and international fame, and is universally admired by all who know her. Twenty years ago she had studied her job until there was nothing else to be known about it. But still she made no progress. Then she began to study herself;

carefully she examined each instance in which she thought she had fallen down and was embarrassed to find that it was some personal fault or characteristic and not job ignorance. A list was made of all the things she had done and all the traits she exhibited which had apparently hampered her progress toward the successful goal she had set. One at a time she conquered these until she was well adjusted personally to the job upon which her ambitions had been set.

Her tasks, which paid such large dividends in remaking herself to invite a greater opportunity, would have been much easier now-a-days, for psychology has accumulated a great amount of information in the past two decades which is most valuable in just such situations as she was up against. This information offers possibilities of an era of great individual achievements, — but not for the person who falsely thinks all success is due to being born successful. What you were born with does matter some, but what matters most for the individual is how he uses what he was born with.

The first thing to know is one's weakness in using inborn qualities. Then to plan a campaign for changing these to strengths. Now is a good time to make some personal analyses on the back of an envelope and to start devoting one week to changing each abuse into a use.

27. This Competitor Is the One to Watch

In New Year's week in 1926 a forty-six year old president of an up-state bank in New York was visiting with his white-headed, feeble father who had founded the bank. "We're still the biggest bank in the country," he told his father. "Got competition licked to a frazzle!"

"You're looking the wrong way, son," replied the old gentleman, his head shaking either from disapproval or palsied age. "Growth should be gauged by how much better your institution does its job, not by keeping its distance ahead of others in the field."

That idea got across, and in New Year's week in 1927 it was a changed bank.

The real competitor is not others in the field; it is the past record. Whether institution or individual, it is the past accomplishments in service that are the competition to be outstripped.

Too many are watching the other fellow and letting their own past achievements lick them in competition.

There is a chronology to this little essay. In April, 1927, one year ago, I was talking over the banker father and son conversation with a general agent for an insurance company at Binghampton. "I've been leading the New York state agencies for more than a year;" he said, "but perhaps I am losing out to this real competitor." Two days later I received the following laconic note, which I had to study a few minutes before I knew what he was driving at: "That competition had me licked, and I didn't realize it. Thanks!"

Yesterday I received a letter from him. He asked if I recalled the banker and his son. For the last nine months in 1927, he said, he had tried to beat his own past record every month and had not watched outside competition. Result: His income tax this

year is greater than his net income last year. And on a purely commission job!

He has grasped *part* of the point. Perhaps when I send him a copy of this he will fathom the remainder: The real competitor is your past record of service.

The saddest spectacle in business is the man who appreciates financially and depreciates personally. The one does not take care of the other; both have to be watched and developed.

The world has progressed tremendously in the last five years. He who takes pride in having held his own has only an empty brag, for he has actually gotten behind standing still.

The parade of life and industry moves. So must institutions and individuals, else they are whipped by their real competitor — the past measure of their service.

Personal appreciation, not the other fellow's depreciation!

28. This Profit-Sharing Costs Little and Pays Big

THERE ARE cash profits which are used to pay dividends on borrowed capital. Some organizations look upon labor as borrowed capital and share these cash profits with the workers. That division, worked out in schemes of varying complexity, is what one usually thinks of as "profit-sharing."

More important for progress, both corporate and individual, is another kind of profit-sharing. This is a kind of profit-sharing which is essential to earning cash profits. It is profiting by experience.

Have you been sharing in this kind of profit?

An industrial executive from Germany visited my laboratory last spring after eight months in this country. Toward the close of his three day visit I asked him for his outstanding impression of our industrial activities.

"In one aspect I think we in Germany excel you, in another way I think you excel us. Otherwise one

country strikes me as on a par with the other in industrial organization," he replied. "We excel you in manpower engineering, — in selecting people for jobs, in training them and in fatigue elimination.

"You excel us in the way in which your executives exchange information and experience. In my visits to American plants I have been shown processes and methods without reserve — the only exception was one textile mill. At home I could not have gotten behind the barriers to inspect these innovations which are usually carefully guarded.

"This secrecy is better for the individual plant," he added, "but hard on the industrial advance of the country."

That is one way in which this new conception of profit-sharing works. But it is not all give and no take.

The profits of experience are shared openly and frankly discussed at society meetings. The accountant who does not get his share of the experience of other accountants at semi-annual conventions is not

helping his firm to accumulate cash profits. Safety engineering experience can be brought back from other meetings. Industrial relations experience from still others. I do not know of a single executive function for which some profitable experience cannot be shared from national or local organizations with regular meetings.

See that such meetings are attended and that memos are written about the profitable experiences that were shared, so that organization workers who could not attend will share in these profits.

The annual executives' picnic, or clambake, or what have you, could be turned into a visit to other plants and firms. That adds profit-sharing to a recreation.

A company president recently called in a consultant. A workable and satisfactory solution to the president's problem was submitted by the consultant a few weeks later. A six-figure check was gladly paid for this.

This was a foolhardy investment, however, for when the consultant was first called in there was on

the president's desk a current business magazine with an article telling about the same problem and the same solution the consultant gave. The president had not even looked at a picture in the magazine!

Consultants will continue to out-accomplish executives who have not learned to share in the profits of the printed experience of others.

I know of one president who has a personal aide do nothing but glean from current magazines and new books articles which will help the president. I know of some executives who take enough periodicals to make a young library; they could not begin to digest all these did not an ambitious wife pick out useful articles. Many plants have found it profitable to have a library staff look after these needs of their executives.

As an illustration of the profit in others' experiences:

A large electrical manufacturing company found itself actually swamped with urgent orders early in the war. The working force had to be doubled, then

trebled. The top control executive had just been reading about the industrial trends after the Civil War. "Dead stuff and a waste of time," his friends had told him.

But from it he had learned that after previous wars there had been great reductions in wages, and accordingly a great deal of labor trouble. He profited by that experience by not allowing wages to be raised during the war. More money, to be sure, was placed in the pay envelope but it was divided into two parts, the basic wage and a war bonus. When the war was over the basic wage, which had not been altered, remained the same, and the war bonus was dropped. More people than live in Dubuque were affected by this, but there was not a single whimper or threat when the war bonus was dropped.

Neighboring firms, whose executives had not been reading Civil War industrial history—"dead stuff—", have not yet recovered from their difficulties in trying to readjust wage scales to post-war conditions.

The average executive can be built into master executive calibre if he can only be brought to share in the profits of other people's experience. He can get this through meetings, plant visits, magazines, books and people. Without it he is still working on the basis of hunch and guess and has no chance to use judgment.

Judgment executives are in demand. Hunch executives are nice to get along with, but most of them wonder what is the matter with their firm.

29. IS RECREATION ON THE PLUS SIDE OF YOUR LEDGER?

As a psychologist I must say that the radio has gone to the dogs. It is true that each week the programs are getting better and engineers are removing a few more squawks and raspings. But the radio has undoubtedly degenerated psychologically.

The same thing is apt to happen to our recreation. As soon as it does we loose a powerful force in personal development.

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Recreation is re-creation. Taken at the right times in the correct kind of doses it works as a mental tonic which will actually produce the results claimed for most inefficacious patent medicines.

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To be active is to gain added value from recreations. I am writing this article for your help in the rear of an automobile speeding through Ohio. There is more re-creation for me in writing this than there is for you in reading it; I am active with fingers and head in its construction, while you are undoubtedly reading passively.

Golf or horse shoes or building ship models are recreations demanding activity. Watching a film star or listening to a radio recital requires but a minimum of active participation. Which yields the more recreation?

To be doing something very different from the daily work routine is to gain an extra measure of value from recreation. Writing this article gives me little recreation because it is scarcely different from my daily routine of work.

If you work with your little grey engine to earn your daily bread, use your muscles and sinews in your search for development. Bridge, whist, cross word puzzles, chess, night-school courses, or play writing may possibly be harmful recreations for the brain worker.

Work and recreation should be so arranged that each week there is opportunity to exercise adequately one's brain power, muscles and emotions. A balance must be maintained between mental activity, vigorous physical exercise and pleasurable emotions — even to the extent of an occasional heart throb.

If your work is specialized you have the greater need of obtaining mental stamina and poise through balanced recreations. Since each day sees an increase in the specialization of our world, factories, offices and even cities have adopted means of bringing recreation to all. This is laudable and necessary, but there is danger in the fundamental idea miscarrying in the practical organization. This is precisely the pitfall the individual may fall into in his recreations. What is a psychologically perfect recreation for John

Staub is not necessarily the one that will re-create his neighbor.

My wife, for instance, secures great benefits from golf, while my personal prescription is fulfilled by making odds and ends of apparatus. Both of us save our heads for the daily research in the laboratory by playing bridge only when social amenities demand,—and even then refuse to take it seriously.

To be doing something creative is to assay more re-creation out of recreation. Creative activities, whether mechanical construction, literary efforts or applying art principles in decoration, are mentally regenerative.

"The average individual gets more good from pounding on a piano than he does from listening to a finely executed concert," says Marjorie E. W. Smith. "While he will probably not produce fine music, at any rate he is active, and is trying to create music."

Amateur minstrel shows in which the office force gets a chance to create jokes and pantomime give

more re-creation than a year in a swimming pool — especially when the Big Boss is the butt of some of the jokes.

Since manufacturers speedily built radio sets of great merit the fashion of building one's own has practically passed into history. The radio has gone to the dogs because the personally creative elements have been taken from the basement workshop and put into the assembly line.

But you may maintain that you feel no need of an active, creative recreation that will balance your intellectual, physical and emotional being. If so, either your judgment is in error, or you are one of the few hundred fortunate individuals in this big world who are following careers which give perfect psychological poise.

30. A GOOD EXECUTIVE IS 50% POET

Many believe that poets are on the verge of starvation. The fact is that the best paid men in America are poets, although they are not writing rhymes. It is industrial history they are writing, by the deeds their poetic imaginations prompt.

We are all poets to a slight degree, but the good executive is more of a poet than the average run of mankind.

There was the executive president of a firm which has had a remarkable and sound growth that his poetic imagination had envisionaged. He became worried because the executives who had been able when the concern was smaller were not up to scratch as growth brought added responsibilities to them. He wanted to keep them on the staff list, and rightly so. How to develop them so they measured up to their bigger jobs was the task.

"We must make poets out of them," I said.

The president must have been a poor poker player for his face betrayed considerable doubt as to my sanity.

"Poets!" I repeated. "You're a poet, even though your hair is cut and you wear a four-in-hand tie. Very few of the real poets are writing verse—they are putting their imaginations to work to discover new methods, virgin markets, new uses for products, new products that are needed, better ways of rendering service to the customer. It takes a poet's imagination to accomplish this!"

The world of fact is changed into one of fancy by imagination. That is, imagination gone riot, as in day or night dreaming or in insane delusions.

The world of today is changed into a better tomorrow by controlled imagination.

The bookkeeper of today becomes the comptroller of tomorrow — if he develops a controlled imagination and initiative.

Creative imagination cannot be developed by wishing we had one or taking physical exercises — al-

though you can buy courses based upon these ideas. We learn to sing by singing, and we learn to use a controlled imagination spontaneously by using it intentionally.

The executive satisfied with his job has little spur to develop his imagination. My president friend was oppressed by his executives being satisfied when they were earning \$15,000, when by a commission plan many of them could have doubled that sum. They had to have their imaginations stimulated to show them how they could use the 100% increase before they got down and dug for it.

When we accept the first conclusion that pops into our heads we are developing bias rather than imagination. We should have at least three plausible conclusions in mind before we accept the final one as justified.

Controlled imagination must work from facts. We can trust our hunches in proportion to the facts we have in our head upon which they can be formed. Executives cannot be too full of facts related to their

job. Statistical tables as well as the experiences and practices of others are facts.

Looking for changes in equipment and methods develops the control of imagination, and usually pays immediate dividends. Imagination is stifled when one is satisfied with his methods, as when he is satisfied with his job.

Sleeping with one's problems and work helps in obtaining solutions. Mental activity and imagination are often times on the job while we sleep, and it costs nothing to think about problems of policy while undressing and to let the mind work on them while we sleep.

James J. Hill's controlled imagination looked west from Saint Paul and saw possibilities of a vast empire. Another empire builder, Cecil Rhodes, saw more than mountain and jungle in Africa and opened a vast continent for the Englishman. He did not achieve enough to stupefy his virile imagination, for his dying words in reply to an admirer who told him

how much he had accomplished were: "So little done — so much left to do."

Empire builders carry their imaginations with them to the last.

There is poetry in prosaic work for those who use their imagination!

31. THE BUSINESS VIRTUE OF BEING ABLE TO TAKE A LICKING

Some Men fail to forge ahead because they do not know when to quit. Especially is this true in this age of style and rapid change and a continually shifting competition. Times do change, with the result that many basic ideas upon which firm and personal success were built a decade or so ago are tremendously expensive to cling to in guiding business destinies now. Perhaps many of today's effective ideas will be sterile by the time another presidential year rolls around.

I happen to live in a district, for instance, which has been a great textile manufacturing area. There

are many who say that the advent of rayon for underwear is responsible for some mills being idle and for others having been liquidated. Personally I do not think that the competition of rayon and the changing tastes it has furthered are responsible for the perilous times through which many of these mills have gone. It is nearer the real truth to say that the management and directorate were not able to take a licking soon enough. Now many of them are completely licked. But, had they admitted only a year or two ago that rayon had red flannels licked, undoubtedly many of them could have shifted product and staged a comeback.

By refusing to take a licking early in the game many of them have had to take a knock-out after more than a century of business success. It is a decided business virtue to be able to face a partial defeat and make an about-face rather than to wait until the deputy sheriff posts the works.

Playing poker may be good practice to develop this virtue.

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Five years ago E. W. Scripps, father of the Scripps-Howard chain of newspapers and of the United Press, took a licking like a man. For years his papers had the fundamental policy of fighting the battles of the under-dog. Bob Howard, who had organized the United Press for Scripps, was called in by E. W., who asked him to take over the business management of the string of large and influential dailies. It was an apparent opportunity, but Howard declined with the statement that he did not like the papers and did not believe in their editorial policy.

Scripps accused Howard of having become conservative after he had accumulated a little prosperity himself. Placed on the defensive Howard pointed out that many of the battles for the under-dog that the papers were still fighting had been won long ago so that their fighting seemed more like grumbling than championing a cause. Times had changed, Howard pointed out, and whole flocks of new issues had arisen, and these the papers should attack in their editorial policies. Whether Scripps admitted this or not, Howard would not go with the papers until their editorial

policies were recast to be in tune with the progress of the age.

But E. W. Scripps had business intelligence, the priceless quality of adaptibility — and he took his licking and acquiesced to the vital policy change before it became a knock-out licking.

More courage was needed for the successful old editor to shift his position than would have been required to stick by his guns until the last paper was losing ground. He retained his intellectual adaptability in spite of his advanced age and was able to exhibit the business virtue of taking a licking and profiting by it.

Some lickings of some kind are inevitable. The first one or two may break the spirit of some men. Or it may sour them and stimulate them to stick tighter to their course: they assume the attitude that they are right and the rest of the world wrong. Neither of these classifications improves as the result of the lickings which seem to be a necessary part of enterprise on this mundane sphere. There is a lesson in each licking or even in each threatened licking;

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this lesson must be sought to aid in recharting
courses.

Edison is reputed to have failed as often as 10,000 times on his experiments, but in response to an inquiry if this did not discourage him he replied, "No. Each time we learned that it had to be done some other way." His lickings were lessons. He tried another solution rather than adhere to the original for "the sake of principle."

There are many who have yet to learn that the wise quitter is really the starter, while the habitual quitter is not even in the race.

It is unfortunate that most of these lickings are unnecessary. Most of them are caused by ignorance. In business at the present time most of them are caused by ignorance of the widespread forces which are at work altering business structure and the habits of the buyer. A licking can be anticipated by some, for instance, unless they realize the significance for their enterprises that more than six million dollars worth of vending machines have been installed in the past four years. There are many lickings that can

be taken in advance if only we will read and study and keep abreast of the trends of the times. The licking then becomes largely academic and is not so likely to pinch one's purse, since it has been anticipated and adjustments have been made to meet it.

"I can usually tell the condition of a company without looking at its books," an observer who knew this commented recently. "As soon as I notice that they are becoming active in attending some of these numerous meetings of management organizations or increasing their list of magazine subscriptions or getting more books into circulation among their executives, then I am willing to wager a tidy sum that their books are showing red.

"They have probably taken a licking," he continued, "and are now trying to get caught up with the trends, when they should have kept caught up every minute of the years when they were so self-satisfied and thought their competitors were crazy.

"Take the situation when John Wanamaker opened his first store in Philadelphia in 1867, for in-

stance. His established competitors smiled because they thought Wanamaker was risking a fortune in marking plain prices on each item and promising to accept the return of all unsatisfactory merchandise. But instead of being able to buy the Wanamaker stock at a referee's sale, many of his competitors who would not take a licking early in the game and change their own policies to accord with the new trend Wanamaker established, saw their own stocks disposed of in this way. They died for a principle when they could easily have adopted the principles they ridiculed and which became disastrous antagonists for them."

That was fifty years ago. More modern competitors have forced trends in artistry of design, completeness of service, advertised prestige, dynamic speed, soothing quietness, machine efficiency in the office, elusive style advances, and changes in distribution channels which must be kept abreast of to prevent a severe licking in all of these sectors. The appalling percentage of small firms which fail to show profits can be suspected to be those that are

competing with John Wanamaker's original establishment and have failed to keep in touch with the tempo of modern business or who are dying for a principle in hopes of showing that the modern tempo is all wrong.

The modern tempo is here and must be accepted. In ten years it will probably seem slow and antiquated, and a new tempo and a changed competition will face those still championing the present tempo which will then be creaking at the joints. The lesson of inevitable change must be thoroughly learned and lickings taken academically in advance to ward off a thorough knockout.

32. "TEN YEARS' EXPERIENCE"

FOR THE past two weeks I have been trying to pick a personal assistant. I have learned a great deal in that time, and so have some applicants. Some of them, I am afraid, have gone away with funny ideas about a psychologist, but I think they have also gone away better students in the World's Greatest University—the School of Experience.

The first fellow wrote me from Long Island saying that he had had a great deal of experience. Back to him went a letter requesting that he tell me what experiences he had had that were worth having, and whether he had learned anything out of these proud experiences of his. I am beginning to suspect that most people who talk about their experiences have seldom been through any that are worth-while. Their "experience" is a catch-penny phrase to cover up their own weakness.

Then there was another letter from Chicago. This from a fellow who had been through so many experiences in such a short time that they gave away his inability to get along with others. He thought his wide experience was an asset, and although he had been attending a good school he had been a dunce as a pupil.

"I have had eight years straight experience in the work," came in a letter from Troy. And why was he still getting experience in the same work? I wanted someone who could profit with two years experience and step into a bigger job.

Business houses are as poor pupils as some human beings. "If Ford can do it, we can," said one, trying to profit by the experiences of another — but their cash reserves were not adequate while Ford's were. They are now analyzing that rueful experience post mortem.

"We'll put on more nickel plate, raise the price and sell it on installments," another decided. They had neglected to survey others' experience and had not discovered that nickel plate and installments would not compensate for their attempt to displace electricity in the home. They took the way out that required least thinking about experience. I think they will recover under the new board.

Thank Providence the students at Colgate University are not so loath to learn as are the students in the University of Hard Knocks. I'd have quit long ago if they were!

A friend, who is now superintendent in a pottery works, with no education except in the school of experience, has risen like an Alger hero largely because he has the habit of asking himself very seriously every

Sunday afternoon: "What damn fool experience am I repeating?" They will not be able to keep him for eight years of experience; he learns more out of eight months experience than many do in eight years.

What damn fool experience am I repeating? I wonder.

33. WHY A GOOD MAN MAY NOT HAVE A CHANCE

"A GOOD MAN hasn't a chance in this organization."

This remark almost invariably stamps the speaker as not being in the classification he is talking about.

There is a deep tendency in human nature for one to think his college is the best, his taste in clothes excellent, his children the smartest. This tendency results in more than 90 per cent of the world thinking it is better than it is.

Most mediocre men have the false notion that they are good men being discriminated against. They need to substitute a program of personal study and improvement for their life-long practice of shifting blame.

Too many men just think they are good while their performance would not give the least indication of such being the case.

A man may be able to convince his wife that a good man hasn't a chance with that firm, but woman's intuition may cause her to suspect that the difficulty lies not with the firm. She will give him scant sympathy if she is wise.

Really big men seldom know they are big. Schwab said he was just a lucky cuss. Lindbergh can't see what all the fuss is about. Cecil Rhodes said on his death bed that he was a failure, since there was so much more he wanted to do. Roosevelt was a hero to his valet.

A college education is a terrible handicap to the chap who just knows he is good. It may take an additional four years with firms "that don't give good men a chance" for his personal deflation to take place. An unfortunate few never recover, and never get far.

There is a worse psychological sin than telling a poor man he is good. That is letting a good man

think he is. Compliments and praise may make a man so well satisfied with himself that he is content to rest on his accomplishments. Commendation is only fair, but must be leavened with discretion. It is a poor friend who has only words of praise.

We have to know what's the matter with us, not how good we are, in order to progress. Out and out failure is a good teacher for many men. It is only the man without stamina who is discouraged by it, whom failure injures. Red ink has improved many corporations.

The man bubbling over with self-confidence just knows he is good and tells the whole world — but the world is likely to be disbelieving. A little red ink experience is good fire for his soul.

Thinking one is good may salve his conscience, but it will not produce results,— except an ingrowing satisfaction which thwarts growth.

34. REVEALING CONFIDENCE

THERE ARE probably not many "fraidy cats" in the world, but a great number of people give the vague impression that they are half scared to death.

You have undoubtedly had someone call on you who seemed afraid of his voice. He may have actually been a very confident, unafraid young man; but his high pitched and uncertain voice devoid of inflection or intonation produced the impression that he was afraid. His own self-confidence was to no practical avail, for the voice through which he tried to express it failed to register the correct impression.

One's voice usually affects himself in the same way it does others. Accordingly a good first aid in the attempt to develop self-confidence is to "get the voice back in the throat and chest," as the voice instructors say. This makes the voice deeper and more resonant. A well inflected, almost musical voice is also an aid. It should be lowered at the end of a sentence and important words in each sentence should be given extra emphasis.

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The voice is one business advantage in which the English appear to excel Americans. As an increasing volume of business is transacted over telephones, so does the importance of a pleasing, confidence-inspiring and expressive voice rise. It is your letter head when the 'phone is used. It is a business card when a personal call is made. More time is usually spent, however, in selecting a letter head or business card than in choosing a voice.

A lack of confidence can also be betrayed by the foot step. A firm, certain, rhythmical step expresses confidence. A weak-kneed, unsteady step as soft as a stealthy cat's may be graceful; but it conveys an impression of fearfulness.

Rubber heels are unwise for the person who lacks confidence. Try putting your foot down as a confident person would.

A smallish Englishman with leather heels and a delightful voice came to my hotel room in response to

an advertisement. Although he had a good record and knew the field, I am sure his confidence in himself was ebbing. For one thing, he had the habit of thinking that a new job would always be better than the one he had at the time. What made me suspect this first, however, was that he would not look at me. I have long been aware that my face was nothing to feast one's eyes upon, and it makes me feel downright dumpish when a person talking to me does not have the self assurance to look at me. I found myself looking where he looked, continually distracting my attention from what he had to say.

I wonder if he was not being frank with me? Or did he need practice in looking people he is talking to in the eye? And I also wondered what kind of a game of golf he played if he couldn't keep his eye on the ball.

"My job was nearly getting the best of my selfconfidence," related a contact worker who had to meet prominent people in the public eye. "After I was past the third secretary and on the verge of entering

the private office, I was seized with a feeling of humiliation and inferiority."

This was rather to be expected, although he reacted too much to the situation to be good for him. He had developed a little formula which solved his trouble. Just before he entered the inner office to confront the great person in flesh and blood, he said to himself: "Who the hell are you?"

Will Rogers' funniest remark in the minds of many people was on the occasion of his famous visit to President Coolidge in the White House. When presented to the President he turned and said, "I didn't quite get the name please." It was much the same as the solution which the contact man found.

The people who are really afraid of themselves are what I like to call the Great-I-Ams. The person bubbling over with his own importance, who considers himself an authority in all matters, who talks braggingly out of the corner of his mouth, who has too much self confidence, is of the Great-I-Ams. These are psychological ear marks of an attempt to cover a

marked feeling of self fear. The pose they unconsciously assume is their simple attempt to hide this self fear.

They are the sad cases. It is diseased lack of confidence thrown into reverse gear.

35. THEY FIND NEW IDEAS — AND USE THEM!

I HAVE found it most stimulating mentally to become well acquainted with what snobs call "the common people." But of this, more later.

There is one outstanding characteristic that I have noted which has set me to thinking.

When I talk with a brakeman he tells me that there is something wrong with the railroad. Just what is wrong he does not say. But he leaves no doubt as to there being something wrong.

Stonemasons tell me there is something wrong with the construction game lately. School teachers feel much the same about their teaching.

And farmers show me the accounts of their last season's crops, explaining how deducts got most of

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the crop. There is something wrong with farming is the only reason they can give. And when the average farmer's cash income in my county is a little more than three hundred dollars per year, I am inclined to think that they may be right.

But what is wrong with all these? Is the world speeding along to ruin, or are they just chronic fault-finders and complainers? Or is there something wrong? Let's see. . . .

A young man from South Africa sat beside me recently at a farm bureau dinner. His family had settled in South Africa from Holland three hundred years ago. They are cultivating a farm of more than three thousand acres now.

"Are you in America on a vacation?" I asked him.

"Vacation? I am working. I am getting new ideas here attending your agricultural schools and visiting with your farmers. I have learned a great deal which will go back to South Africa with me and be used. Each generation one of our family has made a long trip like this and taken back new ideas which

we use in competing with your farmers in the world markets.

"If possible I am coming back in ten years to find what advances your farmers have made," he further explained. "Just one trip by each generation is not nearly enough for us to keep up."

Finding new ideas, and hoping and figuring how to put them to use!

The brakeman wasn't. The stonemason wasn't. Are most of the farmers?

County agents tell me the hardest part of their job is not keeping up with the current improvements in machinery, seeds and methods. It is in getting the farmers who hire them to listen to their advice and to use the new ideas and improvements that are offered them.

Age is probably one reason for this condition. It is rather difficult for a man with forty years of farming experience to believe that a newcomer less than forty years old can tell him anything new about farming. With knowledge of scientific farming he can, however.

Great corporations have made interesting discoveries along this line. Every year representatives of their personnel departments scour the country for young men to take into the business, partly to learn the business, but more to bring new ideas into the business. They are after fresh minds and fresh eyes. Men who have been with them even five years are very apt to take everything for granted. They have become so accustomed to the business that it is difficult for them to see new developments.

But they deliberately search for new men, unfamiliar with the business, to add to their force for the sake of unearthing new ideas that the firm and the workers may progress. They are no worshippers of traditions.

Within the past week I have received two letters from firms that are hunting young men. One was a large typewriter company, the other a large manufacturer of clothing. Both concerns maintain a large planning department in which new methods are tried, new ideas developed and tested. Each of these con-

cerns is hunting for young men with no manufacturing experience to come into their planning departments with fresh eyes and ideas.

You have seen this working out at a ball game. From your seat in the bleachers you have seen much more of the game and understood it much better than the man at the bat whose sole thought was to swat the ball, or the pitcher who was occupied with the aim of fanning the batter.

A large New York banking corporation knows the value of fresh eyes and new ideas. They have engaged, at an almost fabulous salary, a young man of thirty-three, who is to co-ordinate the work of their branches and simplify many of the cumbersome details. Did they get someone for this work who had been in banking work all his life? The first he had seen of the inside workings of a bank was after he had been hired! They did not want a man for this important job who had certain habits of thinking about bank work.

A very peculiar thing is that one of the first changes he ordered made was one that had been suggested by

a twenty-two year old clerk eighteen months before. The young clerk's chief laughed at the proposal. It was inevitable, he thought, that for the first three days of each month the group would have to work almost twenty hours a day to summarize and verify their foreign clearances. The outside consultant, however, without knowing what the young clerk had suggested, ordered almost exactly the same change, with the result that a fan-fold system is now used and that a perpetual balance and verification is maintained with less human effort than the old system demanded.

Fresh eyes! New Ideas! USED!

How are new ideas to be found? By looking for them, by thinking, by observing.

To a recent meeting at which the present pioneering work of the American Engineering Standards Committee was being discussed, the Corona Typewriter Company sent half a dozen men, all expenses paid. They were looking for new ideas. They always have been doing so. Result: One of the first factories in America that foreign industrialists visit

is located in the little hill-surrounded village of Groton, where new ideas are constantly being searched out, tested and put to work.

Do you visit the plants of others, not looking for things to criticise, but for new ideas? Have you found them in extension courses, at institutes, at meetings? Have they been thought over in the quiet of the long winter evenings or while resting from the hot midday sun in summer?

And the habit of looking for them, of testing them, of using them?

If you have these habits, then I suspect you do not have much fault to find about your business being poor.

36. Priming for Ideas

MACHINERY for business use has been vastly improved during the last two decades. Machines are being used in ever-increasing numbers.

But machines do not have brains. They cannot generate new ideas. Business is changing, and new

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ideas that work are in great demand. These ideas have come from men.

Human brains and emotions have not improved in the last twenty centuries! That may make matters look better for the machines than it does for men. It depends to some extent upon the particular man.

Some employes are just machines that go home after working hours; they are paid for on the installment plan at so much per week or month. They are apt to find themselves displaced by a metal machine which can do the work with less errors and cost. Men are more useful than machines only as men are capable and experienced in developing ideas.

Generating ideas is difficult for many, because they have stereotyped thinking — habits of thinking which are difficult to uproot. Try this experiment as you are reading these lines: Clasp your two hands naturally. Now notice whether the right or left thumb is uppermost.

There is no anatomical reason why one thumb should be uppermost rather than the other, but for

years you have had the habit of clasping your hands in this particular way. Now let's see how it feels to change this habit:

Clasp your hands again, but this time see that the other thumb is on top and that the entire interlocking of fingers is also changed accordingly. It does not seem "natural" or "right."

"Human machines" are peculiarly inclined to have their work dominated by habits such as the handclasping indicates. Similar habits involve emotions, and worst of all, thinking. To excel a machine men have to tear themselves away from habits of thinking which make them slow to adapt to changed business horizons.

College men are in especial demand right now, not because they are essentially any better than more experienced executives, but rather because they have not been in industry so that their thinking has become stereotyped. Not having been thinking about business, they are likely to think in a rather different way; and it is these new slants that pay dividends.

Ideas are really easy to get — after you form the new habit of getting ideas. One can form the habit of bringing forth ideas just as he is usually handicapped by the habit of sticking to a few old ideas. The difficult part is breaking off the old habit.

A good way to start is by what I call "priming" the mind. Your head can actually work wonders, once you get it started. And priming is a painless and yet effective way of getting up momentum. You are priming your mind for ideas if on the way home from work you think over the details of your job and then concentrate on some part — any part — and try to figure out how it could be improved or eliminated. That is the first step in the priming process. The next few steps are to keep reminding yourself of this problem from time to time, especially during odd moments. It is the overwhelming percentage of people who do not even think over their work when they are away from it. They are all the more like machines for this trait, and I imagine they still wonder why they do not advance more rapidly, or why competition is creeping up on them.

"Fertilization" is a term I apply to the other phase of generating ideas. The mind can not work in a vacuum; it is to no avail to prime for ideas and not feed in anything the mind can work over. There must be information your mental processes can tap. As a general rule, anything you read except fiction will help fertilize ideas; and even fiction will help from time to time. Westinghouse fertilized his mind by reading a story about the Mont Cenis tunnel. The more you read in your direct field, however, the more certain you can be of beating out the machine which has been steadily improved.

The primed mind can be "cross fertilized" by conferences and discussions with others, — especially if one sticks to brass tacks, talks about something that is vital. It is essential to uncover facts, keep to facts and know the experience of other concerns and persons. "Fog words"—impractical, visionary, foolish, complicated and their like—yield no cross fertilization but show human reluctance to change habits of thinking.

And machines have changed. Men have to.

37. CULTIVATING MEMORY IS EASY

JEDEDIAH BUXTON was a remarkable Englishman. He remembered all free drinks of beer he had consumed — and the list would have taxed any memory. This article has nothing to do with the 18th Amendment, but it may indicate that after all perhaps Jedediah had no better memory than any of us. In fact, it was probably worse, for alcohol is known to impair memory.

The average man does not need a better memory. He has plenty of latent memory horsepower. What he does need is to use his memory powers better. Memory powers probably cannot be increased, but they can be put to a vastly more effective use.

The first of our daily dozen for cultivating memory is to *try to remember*. This seems absurdly simple, but it is tremendously effective.

When you are introduced to a stranger, have you usually tried to remember his name, or have you been hurriedly trying to think of something appropriate to say? In the embarrassment of introduc-

tion, one is often too concerned with looking for lodge emblems to try to remember the name.

How effective merely trying to remember is was shown recently by experiments at the University of Minnesota, where psychologists found that memory is strengthened from 40 to 60 per cent by this simple effort.

Whenever you meet someone, try to remember his name. If faces are your weakness now, try to remember the face. Try to remember the voice. When you are reading, try to remember significant things.

And try to remember this memory aid and put it to use.

Say it over to yourself is the second aid in this easy cultivation of memory.

Your difficulty may be remembering names. Overcome this weakness by taking opportunity to mention the person's name when acknowledging an introduction. Say: "Pleased to meet you, Mr. Smithers." Of course, no one should have difficulty remembering

a name like that. The point, however, is to say the name as often as possible, perhaps in conversation or silently to yourself. In the conversation, compliment the person indirectly by mentioning his name several times.

"We were just talking about the election, Mr. Smithers" gives an opening for conversation and helps holeproof your memory of his name, since you have heard yourself say it.

When you run across something valuable in your reading, pause long enough to think it over, to repeat it.

Can you recall the shape of Germany? Can you recall the shape of Italy? Why was the shape of Italy better remembered?

When you were first told about Italy in elementary school, your teacher explained how it looks like a boot. Memorizing this was made infinitely easier, because this new information was linked immediately with some old information.

The memory aid which this illustrates is to memorize the new through the old.

The man whose name is Leavenworth can be remembered by one's associating the name with the federal penitentiary. You can remember Mrs. Osgood better because she lives in Oshkosh and is active in welfare work. As you are saying a name or fact over to yourself, think also of other memories you possess with which the new can be linked and strengthened.

You should also use imagination in remembering. Think how Smithers' name would look if written on a typewriter. Imagine it written in long hand. If he is a lawyer, imagine a bronze name plate with his name in bold relief.

Always use your imagination to picture in your mind's eye the things being memorized. Day dreams can be put to work in helping out in this, as we shall find in the next aid.

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One of the astonishing things about memory is that within a day you forget new things more rapidly than you do in the following thirty days. You can give more of your memories a thirty day sentence for permanency if you review new memories soon.

This tremendous first day loss should be offset by review within the first twenty-four hours. The salesman should review the name, face, hobbies and objections of new prospects the same day he becomes acquainted with them.

Time often spent in day dreams on the trolley or elsewhere can be put to work for one's development for greater achievement by using the day dreams to brush up on these recent memories.

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Why do advertisers use full pages for only a few words, brilliant colors which are expensive in printing, unusual type forms? For the reasons that they remember the fat lady.

The fat woman of the circus is remembered better than the persons in the crowd who jostled you, because your attention was concentrated on the fat

woman. You should give full attention to whatever you want to remember.

The agent who is writing down notes is apt to lose a sale because his attention is divided. Stenographers have difficulty in remembering what is in their notes because their attention is on getting the correct symbol on the paper and not on the thought of the dictation.

I think I am justified in saying that sour people have poor memories. The person who thinks his job is hard is using poor psychology. Make memorizing interesting.

Interest is not caused by the work, but by the way we look at the work. President Roosevelt found everything he tackled immensely interesting. And you probably know also of his almost phenomenal memory. Jay Gould — the little wizard of Wall Street — is another illustration.

Imagine a little enthusiasm once in a while; perhaps you can develop it into a permanent habit. If you succeed, your memory will be helped greatly. If

you don't like your job, I want you to pretend that you are interested in it. Your bluff at interest is likely to become a habit that stays with you.

Can you remember rpelnosa?

Or can you remember personal better?

The same letters are in each memory task. The second is remembered more easily because it capitalizes the memory aid of looking for the sense.

Meanings, not mere letters and words, should be remembered. There is some sense, some meaning, in everything. If you think meanings and sense, you can remember much better. When you learn, for instance, that Laird is the Scotch word for Lord, the new name is remembered more easily and longer. (But it doesn't mean that your humble servant is a Lord!)

The Chicago World's Fair was in 1893. Is that easy to remember?

It may be easier to remember when you learn that it was planned to commemorate the 400th anniversary

of the discovery of America. You at once know that it was held 400 years after 1492 — except for the disturbing fact that the fair was delayed a year because the buildings were not ready in time. As soon as you get the meaning, the memorizing is easier and lasting.

Why do firms advertise month after month? Why does the name W. L. Douglas appear more than a dozen times in each copy of a well known advertisement? Business has found that memories of their products are strengthened if it uses repetition.

After you are introduced to Mr. Smithers, if you find opportunity in the course of the conversation to mention his name four times, you have practically doubled the strength of your memory for his name.

Overmemorize!

Engineers tell me that when a bridge is built it is given strength enough to hold a load of at least 25 per cent in excess of its rated capacity. They reinforce the bridge to be safe.

You should overmemorize to be safe with your memories. After you can repeat the new name or new fact, the process of holeproofing has only started. If you want to use this new memory six months hence, you must overmemorize, else it may have quietly disappeared. The engineer can tell when a bridge is beginning to weaken. We cannot be so certain about when our memories are going to give out on us. The rational thing is to overmemorize so that the facts will remain for life.

By birth, some have better memories than others. But by actual accomplishment, not one person in a thousand is getting all the power there is out of the natural memory with which he was born. I assure you that consistent use of these ten pointers will help you greatly to approach your natural abilities in the use of memory.



$\begin{array}{c} \text{PART V} \\ \text{PROFITS FROM LOYAL MORALE} \end{array}$



38. WHO WEARS THE PANTS AROUND YOUR OFFICE?

A SHORT TIME ago I was in two plants. One was having some difficulty with dividends. The source of trouble had been localized in the upper 125 executives; it was thought that I could work some psychological miracle and take the red ink off the books.

The other plant was a competing works. They were having no trouble. I went out of my way to visit them because they were so continuously successful. My readers know both these plants, but for obvious reasons I am not naming them.

The outstanding feature in the plant worried about the red figures was that every executive was also worried about the impression he was making on "the big boss." The chief executive had spent his life building up the company, it was his company, and he ran it. He was a boss if there ever was one.

The works with lasting prosperity was also a one-man plant, but the rank and file of executives

scarcely knew they had a boss. They had not been made merely routine workers by the wrong kind of bossing.

If there is no doubt at all as to who is boss around your place, the chances are that you have the wrong kind of a boss. The chances also are that initiative is at low ebb and that constructive ideas for building up the firm are few and far between.

By the same token, if you are so crude a boss as to let those under you know that you are paid for thinking and that they must jump when you cast pearls from your mouth, you may find that you are already at the top rung of your ladder, which is apt to be a pretty short ladder.

I have been rather amused by a "suggestion system" which one "big boss" who let everyone know he wore the pants tried to put across. Prizes were offered, the workers called together and told about them, and then he sat back expecting to be deluged with money-making suggestions. But he sat back, and he sat.

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His whole attitude toward handling others had been such that workers thought his suggestion system meant that he *dared* them to give a suggestion. At the end of a year, from his 350 employes had come not one suggestion; and as evidence of good faith the prizes offered were used to help the Community Chest.

Young executives are the worst offenders in being too bossy. The first flush of power is apt to overcome them. Rapid advancement is usually bad, even for an outstanding producer. It is more wise to give a slight amount of power first, and then to watch closely to see if it has unduly affected them.

Of course there has to be someone in charge. Otherwise there is chaos. But bossing should be like the invisible power behind the throne. The boss must look after his workers as well as domineer them. He must get suggestions from them as well as give them orders. He must delegate responsibility to develop others to take his place — if he ever hopes to go farther himself and if he wants to raise his shoul-

ders above a mass of detail. He cannot do this if he lets the world know he wears the pants.

Only the weak executive lets others know about his power.

39. You Have to Hire a Family to Fill One Job Have you any industrial-in-laws?

They may explain why a good man, satisfied with his work and pay, decided to leave. The worker's wife, who is one of your industrial-in-laws, may have caused him to leave by insisting that they move back to Springfield where she has more and closer friends.

When the employment department tells an applicant to report for work the following morning it is really a family that has been engaged. Family troubles cannot be checked in the locker room when the man arrives on the job. The next installment payments, a nagging wife, boys who have fallen in with a tough crowd, sick children, failed school work, after-effects of neighborhood squabbles are all taken

right to the bench or desk as soon as the clock is punched.

These industrial-in-laws help the mind wander from the job, may lower morale if they encourage a spiteful disposition, and lower a worker's general effectiveness if things are not running smoothly with them.

An organization cannot be built out of bachelors, and even if it could they would still bring personal problems, worries and bothers to the job with them.

The employer can never reasonably hope to eliminate all effects of his in-laws, but much can be done to minimize them. There is one sales manager who always finds some legitimate excuse to drop in at the home of an applicant unexpectedly before a promising man is hired. This is motivated only partly by his insistence upon knowing all factors in the applicant's qualifications; he also wants to become well acquainted with the applicant's wife or mother so that by becoming a "friend of the family" he can give patriarchal advice that prevents difficulties arising from his industrial-in-laws. "I think I have pre-

vented more divorces than companionate marriage will cause," he told me.

This sales manager is an exceptional individual and has probably been able to accomplish more by his interest in his men's families than many other managers could. But his efforts point the way for any manager.

One large manufacturer dominating a community has gradually developed his medical department so that it not only provides aftermidnight home service when the local physicians refuse to get out of bed, but also has a loan fund to help out in financial crises in employes' families. This is rather stretching the definition of industrial medicine — but is good medicine; and advice will be taken from a physician or nurse when a "welfare worker" would be shown the door with the remark, "We don't need charity."

A novelty manufacturer has kept his industrial-inlaws interested by sending them new novelties from time to time accompanied by a letter telling them they will be interested in seeing what John makes and suggesting that perhaps they have some ideas

regarding improvement in the product. The firm's best seller now is the composite result of several ideas the in-laws have sent back. The in-laws have been rewarded by a community playground and recreation center.

A branch office manager with no novelties to distribute to his branch-office-in-laws uses personal greeting cards in cases of illness and at the holidays, takes time to help arrange loans for the purchase of real estate, and occasionally gives the office boy a personal loan on a watch.

Just as the employe's family may be an asset, so the manager's family may help in the problems of the in-laws. There is a small gear works which is owned by a manufacturer of the old school who ridicules efficiency as being an assortment of colored pencils with broken points in an inaccessible pocket. While his layout and planning could be improved, he has as efficient and loyal a force as you will find in a day's search. This is largely because his wife is a busybody who objects to not having to do the housework and who insists upon making jellies galore the

whole year through and taking samples personally to the various families. She has taken children riding while their mother took a well-earned but otherwise impossible nap, spent an afternoon showing how she bakes a cake without eggs, helped pick out shrubs from a seed catalogue, and done a good many other things helping out with the plant's in-laws which her rather impersonal husband never suspects, and for which he would take the credit if he knew about them. Like the sales manager we described, she is a remarkable individual and succeeds in being liked where many would be considered butters-in. Some of us have talked over her activities and reached the conclusion that she accomplishes so much because she likes just folks.

Have you ever tried to inventory the intangibles that are a definite part of the assets of the business? An important way to start such a manpower inventory is to find out if your industrial-in-laws are on the asset side.

40. HAVE YOU EVER ASKED YOURSELF FOR A JOB?

A GOOD-SIZED gear works in a medium-sized midwestern town had a production supervisor resign. Foremen and other workers had discussed at noon hours which foreman would be his successor. The son of one of the stockholders was selected for the job. Within two weeks the spontaneous flow of applicants into the employment office had dwindled to zero and advertisements for help had to be inserted in Chicago papers. Three years later finds this gearworks embarrassed in scarcely being able, even with frantic endeavors, to hold together a force of floating soldiers of fortune.

The notion is abroad that the employment interview consists of sizing up the applicant. In fact, however, that is only a small part of the interview. There is something going on in the head of the applicant who is nervously sitting across the table. The applicant is sizing up the interviewer and his company, and often the applicant makes a better estimate than the interviewer does. "Hired, but did not re-

port" surveys reveal that the interviewer thought his job was to buy help, while it actually involved selling.

The interviewer is being interviewed more subtly than the applicant. The odds in this trial of wits are in favor of the applicant. He has gained more information about the manpower policies of the firm through underground and unofficial channels than the company can ever hope to learn about him through official correspondence with his previous employer.

These outside sources of information the applicant has about your firm may be correct and they may not. They are usually a true mirror of workers' opinions, however, and generally nearer the point than the employer's own opinion. The workers know how they feel about things, and whether their feelings are justified or not they are the determining factors in the prevailing worker attitude.

There is only a brief half hour at most for the interviewer to do his sizing up, while the applicant has been sizing up the firm unconsciously and uncannily ever since he first heard about it.

Neighbors, gas station attendants, billiard partners and even the Ladies' Sewing Circles have been interviewing the company indirectly but effectively ever since the first brick was laid.

If you have to scout for applicants there is probably an unfavorable verdict being rendered your firm in these underground channels among workers. The worker is not in error in sizing up the company; he knows what he wants in working conditions, supervisory treatment, freedom from accidents, promotion, insurance, hours, and wages. The least important of these is wages.

The exit interview of leaving employes is sometimes used as a medium through which the employer hopes to discover the weak points in the manpower policies. Leaving employes are prone either to be too polite since they may want a recommendation some time, or to be entertaining exaggerated opinions of their wrongs; in either case the picture they yield is not true of the great body of workers at the bench or in the waiting room of the employment office. Attempts have been made to convert both the em-

ployment and exit interview into supersales efforts to bring about a favorable worker opinion. These firms have caught a glimpse of a will-o'-the-wisp but have failed to get the permanent solution. It was not lack of sales effort in previous interviews which gave them their opinions; the direct causes of their attitudes should be overhauled — foremanship, promotion possibilities, fatiguing conditions, job respect, and considerate dealing.

The applicant will suspect something deficient in the firm's manpower policies if their interviewers are salesmen. If a "square deal" is given, the interviewer need not mention it — the applicant knows whether or not this is so before he appears with hat in his nervous hands.

The most vital question for the employer to ask himself is: "Would I really want to work for myself?"

The next question to ask is if the underground impressions the great body of possible applicants receive are favorable and fair.

If not, something should be done about it, for it adds to costs in a way accounting records do not reveal and cuts into the priceless *esprit de corps* called morale.

41. ADVERTISING HUMAN RELATIONS

WILL a slogan maintain employe loyalty and morale?

In motoring through an industrial region a short time ago I ran into a small city where I was informed by a large electric sign arched across the principal thoroughfare that this was the "City of Contented Workers," or words to that effect. At once I suspected that there must be something rotten in the local industrial Denmark which prompted the management of the single and tremendously large factory in the city to advertise for effect upon workers. While the psychological background prompted the suspicion, it also forced me to spend an unplanned two-day stay interviewing workers, tradesmen and management.

For years I had read in trade journals and business magazines about the wonderful provisions made by

this company for the workers. It had seemed as if the workers would have wonderful morale — but that electric slogan aimed at the workers seemed like a direct admission that these generous provisions had failed.

One would not ask for a better developed community in which to live. Broad, paved streets, spacious lawns, workingmen's houses distinctly above the average and recreational facilities on almost every corner should be enough to make the workers contented. But the arched slogan over the entrances to the town threw the lie at these pleasant surface indications.

The other side of the picture began to emerge when the evening paper appeared. A long interview with the president of the company attempted to explain why his workers should be contented with their wages, and why they did not need as short working days as some city workers who had to spend two hours going and coming from work.

A worker on a bench in one of the recreational corners explained half an hour later that as soon as he had paid for his house he was going to spend some

of the two extra hours a day on the trolley and work in the big city. "It's a great town to live in, but —" and he nodded his head toward one of the nearby plant buildings — "that's no place to work!"

The same reports came from every source. Even management was a bit evasive and would not flat-footedly recommend dependence upon a slogan to build worker morale.

If human relationships are satisfactory it is not necessary to advertise the fact; and if they are not basically satisfactory advertising can never compensate for shortcomings in the plant or in the pay envelope. A slogan in such cases miscarries and actually rubs in the feeling of discontentment rather than engendering the opposite frame of mind at which it is aimed. It takes a high degree of worker morale to back up a slogan and keep it from becoming vicious. The slogan should come after and not before the horse.

In a commodity sold across merchants' shelves advertising can never compensate for poor quality. Yet it is strange that manufacturers who acknowledge

the truth of this still strive to sell morale on the basis of advertising, pure and simple, without having in their plant, to back up the copy, the qualities for which the workers yearn.

Little sermons for building worker spirit which are placed in wage envelopes as stuffers, like the slogan, are effective only when the workers have realized the truth of the brief message in their daily dealings with the company and its supervisory representatives. The truth of these sermonettes may have been realized only subconsciously; but it must have a basis in the actual experience of the worker who reads it if the worker is not to become suspicious of the sincerity of the company. This has to be watched closely, or the stuffer message becomes like the pill Charlie Chaplin tried to blow down the sick horse's throat in a recent picture. It was a beautiful idea — but, you probably remember, the horse blew first and the comedian had to swallow the pill himself.

An acquaintance who was engaged for the terriblesounding position of "Welfare Director" for an eastern manufacturer thought for the first two years

that his principal job was to deliver inspired little messages to the workers to make them forget the brutalities experienced from some of their supervisors. He produced reams of literary and oratorical art. They were so powerfully stimulating that soon the management thought they were the world's outstanding benefactors. These crisp messages produced results for my friend with the higher-ups who blushed at the implicit flattery in each one, but let me relate the experience which first gave him an inkling that all was not rosy with the worker's reception of these.

He stopped in at a corner drug store to use a telephone one evening. Two workers were at a counter near the booth and saw him enter.

He did not close the booth door tightly and overheard this conversation:

"He works at the plant, doesn't he?"

"Maybe you call it work — he's the guy that tells us how tickled we ought to be to work there. Me that's got the worst slave driver since Simon Legree to work under."

"Oh! So he's that hot air artist!"

Something in the inflection of the last comment caused my friend to remain in the telephone booth until his two conferes had left the store. For the first time he began to realize that his slogans and sermons had been directed to the wrong sectors of the plant.

Morale must be built by overhauling company policies and by selecting and training supervisors so that they can develop this cherished quality. Slogans and advertising for bettering the human relations within the company should be directed to the management to stimulate them and to set a goal for them to achieve. To direct these to the workers is more like pouring oil on fire than on water. Worker loyalty has to be earned; catch penny slogans do not earn it but merely advertise to the world that gives second thought that something serious is amiss or these tactics would not be needed.

A slogan may help maintain morale, once it has been earned, but it will not earn worker respect unaided.

42. Add Pussyfooting Into Your Overhead

Does a man have a right to express his frank judgment in a business situation within his firm, especially when he knows that this is counter to the judgment of his superiors?

A short time ago I received a letter from an executive in one of our largest firms. In the same mail was another letter from him, written in long hand, in which he asked me to take the typed letter with a grain of salt, since he had to write that for the benefit of company files and policies. He gave me his own judgment on the questions he answered in long hand, he parroted the prejudices of his superior in the official letter.

This is not the first rather dramatic experience I have had which reveals a tremendous amount of pussyfooting toward the executive next higher up. It costs in ideas suppressed, in constructive time being consumed to avoid stepping on the toes of the man next above.

It is astonishing how widely firms differ in this quality. As an outsider I have been able to get the confidences of large numbers of executives of various firms. This has caused me to make a mental division of organizations into two groups — the pussyfooting and the above-board types. Others have made a similar classification into sales-dominated and engineering-dominated. The sales-dominated easily becomes the pussyfooting. Since the customer has to be flattered, treated with utmost courtesy and not crossed in any obvious way, this attitude can quickly permeate the whole company organization until not a word from one executive to another is uttered without thought to what he would like to have said to him.

This is not back-biting. But it is stifling and causes a great amount of chafing. It is a condition which breeds mediocrity. "Too cockeyed polite for me to stick with them," a planning engineer epitomized it to me recently.

A two-fisted above-board type of works manager, who was local top executive in a plant which had a

large proportion of executive personnel due to their working almost entirely on special orders, did not believe that he could have a pussyfooting organization. Being of an inquisitive turn he devised a test to find out. He would circulate an opinion which he really did not hold, and which was obviously foolhardy. He was flabbergasted to find the majority of his executives agreeing with him. "Look here, you pussyfooters," he told them, "what if I had gone off my base and actually put something across as wild as that! Would you simply have agreed with me and let the works go to smash rather than lose my personal favor!" Now he keeps them on their thinking toes by alternately advancing his bona fide judgment and some just as emphatically stated "test judgments"; since they do not know which are his real opinions and which the test opinions they have had to stop their pussyfooting and loosen their minds on all of his proposals.

What if I had gone off my base and put something across as wild as that? Within the year I got to look under the lid of a mid-western concern, which was

typically pussyfooting, where that actually happened. The top man in production was gradually losing his mind, and his fantastic production ideas were accepted by his pussyfooting subordinates with a courteous, "Splendid, sir." He is in a hospital now, but they were unable to find a successor among his own assistant executives. All they could think of was "Splendid, sir." The sales branch is now using national advertising in a desperate effort to pay the next dividend without having to dig into the reserves.

Death also plays havoc with the pussyfooting type of organization.

So does almost any crisis, for it makes all heads combined little better than one; the crisis usually indicates that the one was wrong.

Don't pussyfoot as you read this. Conjure up some "test judgments" instead, and try them out on your subordinates. I'll wager that two-thirds of my readers will be astounded at the amount of pussyfooting they reveal.

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Business does not need more "constitutional agin'ers," but it needs fewer pussyfooters than it has. The superior's task is not to generate all the ideas himself but to develop better ones in the heads associated with him. Often it takes a serious crisis to convince him of this truth; and the fact that the crisis is likely to come rather soon is fortunate for the man who would rather handle a group of pussyfooting rubber stamps than a group of affiliated minds, as he may the sooner realize his mistake. The amusing element — to the onlooker — is that when the crisis does come some such executive is very prone to lay the blame upon the allegedly affiliated minds which he allowed to be used only as rubber stamps.

Does a man have a right to entertain opinions contrary to those of his chief on business policy and methods? He has an obligation to!

43. Most Men Work for a Boss — not for Money

"THEY RAISED the wage scale 25 per cent and then 50 per cent, but they couldn't get workers," a visiting psychologist from England told me recently in reciting some of his valuable experiences in helping manufacturers of Great Britain by adding a psychological slant to their management.

It seems there were two textile plants in the same medium-sized countryside town. Both had the same wage scale, but one had an advantage of some carefully guarded secret processes. The owners of the plant with the advantage of processes ran their establishment the way they wanted to, smiling complacently at the superiority this gave them over their rival. Their rival carefully studied the workers and tried to run the plant the way they thought the workers would appreciate.

Wage offers which were almost fabulous could not draw employes to the other plant when that plant was in urgent need of them. They were working for a boss, not for money. Their boss had the strangle

hold on his local competition because he had a hold on "his men" that paid them mental dividends which a 50 per cent wage raise would not cover. Men are that way!

Men are also so constituted that you cannot get this hold on their loyalty on an inadequate wage, just as unjustified wage offers cannot bribe them away once you have inspired their loyalty.

Treasure is where man's heart and mind is satisfied. Not purse strings, but vibrant soul strings must be loosened to make his treasure his work.

The executive who has come up through the ranks inspires loyalty without effort, for he still remembers how the worker thinks. If unfortunately he has forgotten this, he is not likely to rise far above the ranks.

The successful big executive is big because he is not too small to look into the mind of his lowest worker. There are many executives who have yet to discover these secret processes, which the glance

of a yardman's eye or the shrug of a typist's shoulder may betray. Perhaps competition has already discovered these secret processes.

P. S., who was works manager of a plant not far from my laboratory, had this secret. It helped lift him into national and then international leadership in the management field — but he hated to leave the plant, and the workers disliked his leaving more than did he. He had been justice of the peace and had married them and had fined them.

Mexican yardmen whose glance he had understood forgot the fine the justice had levied on them for catching trout out of season; and remembering only that he understood them, they came to his house after hours while he was packing to leave and told his wife to tell him they had called, being ashamed to face their friend with tears in their eyes. One burly Irishman from the repair gang came to say good-bye to his understanding boss who was packing up to go overseas to stay, but the mechanic could only say, "Aw hell!"

The crucial test of a good human executive was passed by P. S. — will I be missed by "the boys" if I quit?

44. How to KEEP THE FORCE IN LOW GEAR

MAN MANAGEMENT has suffered as a consequence of the changed demands administration has placed upon its leaders. Cost-shaving, eternally changing marketing conditions, more intricate financing, countless more legal entanglements and a more intelligent competition have forced into prominence an executive type radically different from that characteristic even so few years ago as the Spanish-American War.

The older type had only the bigger kinks to keep straight and guided firm destinies by no more accounting background than a summary of monthly expenses and monthly receipts. Their strong points were in handling their men with an iron hand. Not brutally, but if the employe was not up to snuff he was told so. I am inclined to believe that the executive of this older type actually enjoyed telling his workers what was wrong with them in many instances. This may

have made the workers better — but that is getting ahead of the story.

The newer type of executive equipped for meeting modern changed conditions keeps an eye on a score of minute kinks for every one big kink his predecessor watched. They have studied more and know more about the fine details of organization and financing. The newer type may be a better business man, but I think we can easily find much evidence that he is not the manpower manager that his forebears were.

Mere increase in number of employes, for instance, should not make it imperative to set up personnel departments, welfare bureaus and special training courses in how to work with the men under you. The spreading use of these and similar schemes reflects to me the fact that as specialized and highly trained executives have been replacing the old-fashioned general executive, industry has been increasingly saturated with a type of leader whose strongest point is not manpower problems.

The newer type executive, who is oftentimes more a scholar than a business man in the old sense, is

generally deficient in pointing out to his subordinates their manifest weak points. It just isn't in his nature to do this; he dislikes the thought of doing it, possibly even lacks the guts.

"But it might create ill-will, and it might make the poor man dissatisfied with me as a boss so that he left, thus adding to our labor turnover figures which we have been trying to lower," he usually says. This is merely intellectual buck-passing. He overlooks that so long as he neglects this important part of his managerial work he is subsidising incompetence and is being unfair to his men in not helping them develop to their maximum ability.

He may remember that the best way to put the force in low gear is to bawl someone out. To this true maxim he should add that the best way to keep the force in low gear is to refrain from pointing out to them each weak point he can discern.

The old-fashioned cussing out by a snorting, roaring Bull-in-the-Woods supervisor undoubtedly did put many workers into low gear, but many were

powerfully improved after the sting of the process had worn off. Bad as this may have been it was undoubtedly better than the neglect the modern type is so prone to follow.

This neglect has become so marked that each month sees some additional firms adopting a rating sheet for employes so that the workers can be told what is the matter with them anonymously and without embarrassing their poor, considerate superior who lacks the gumption to tell the worker directly. Rating scales of this sort help, but do not get at the fundamental weakness which I think lies in many of the executives rather than exclusively in the workers under them.

The friendly personal interest of a superior is missing in the cold check-marks on a rating sheet. This friendly personal interest helps the worker more than a rating of average or poor. It provides a psychological background from which the executive can point out to his men what they must do better and what they must stop doing if they are to develop into valuable men with the firm. Given in this fashion

the severest bawling out does not put the force in low gear, and does take them out of low gear.

It should be done in private, and on firm time. It should be done at once, without telling Frank that you want to talk some serious things over with him before the week is over, thereby reducing his job effectiveness all week by his wondering what the deuce is the trouble. It should be done at once so that the modern executive type does not have the unpleasant task bothering him for even a day.

Keep a smile, but keep serious. If you don't you may put your force in low gear while you are trying to take them out of low gear.

Talk with the worker so that when the short conference is over he will be genuinely thankful that you took enough interest in him to study his development and give him this help.

I am inclined to think that it is less of an industrial sin to put the force in low gear accidentally while trying to take them out of it, than to keep grinding

away in low gear with the eye on turnover figures and the relative consumption of lead pencils month by month.

45. LUCKY PEOPLE SELDOM ARE

JAY GOULD'S "luck" was the topic of conversation in many homes when the little wizard of Wall Street loomed large on the horizon. But to the little man with a prodigious memory it was the result of hard and straight thinking, and even the visions of professional mediums were called in to aid him in directing his maneuvers of millions of dollars. Yet the word on the tongues of the populace after one of his coups was "luck"!

The lie should be called to Jay Gould's luck that financial history be kept straight. The lie should also be called to his luck, and almost everybody else's luck, to keep the idea of "accidents of fortune" from becoming a hyperquantivalent idea which makes actual accomplishment fall far behind potentials for accomplishment.

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An organization can become imbued with ideals of a socialistic revolution with less real damage than when the idea of accidents of fortune begins to saturate the minds of the staff. There is luck, of course, but it plays a much more minor role in the drama of a life of accomplishment than those who do not accomplish like to admit. By allowing their ideas of luck in human affairs to become hyperquantivalent they quickly shrivel their own possibilities for accomplishment as well as the enthusiasm-for-doing of their associates. It is bad luck for one to allow a faith in luck to take root in his mind.

Charles Schwab all too modestly says he is just a lucky fellow. I have never talked with anyone who has played with him at craps, where we find pure luck if the game is among honest men. But I have talked with those who have worked directly under him. What Schwab calls luck, they without exception call tremendous application to the job.

Thomas Edison paid homage to a lanky, six-foottwo Englishman by making a special trip to Rochester to the home of George Eastman to witness the first

showing of new colored motion pictures. Edison's visit was not a tribute to luck, but to ten years of dogged work and thought by John G. Capstaff. I imagine some of his neighbors are speaking about Lucky John — but Capstaff was working and thinking while they waited for luck to come their way. Back of most strokes of luck you can find ten years' hard work, back of some of them you will find more years.

Micawber spent his life waiting for something to turn up and nothing did. This ill-fortune of Dickens' character is located in his expecting something to turn up, when most things are turned up by the lucky individual.

A belief in accidents of fortune buries many capable souls as modern Micawbers.

When the Great Plague ravaged the population of London and garbage carts rattled along the cobbled streets with drivers calling "Bring out your dead," it was a picture of bad luck to many. To a few it was a challenge to ignorance. Disciples of these few have spent years in research to combat the ignorance

directly and the pestilence thus indirectly. Steeped in a belief in luck such plagues would still be common, but a belief in man's superiority over luck has goaded workers on to the successful conquest of the dread virus.

The Great Plagues of Business — competition, changing markets, new buying tastes — engulf as their quickest victims the followers of fortune.

It is strange that luck, unlike lightning, seems to strike often in the same place. Repeated "lucky strokes" of corporations and individuals dispel the mathematical probability of their being luck.

If we were a vegetable or were sitting in an honest game of African golf our success would depend almost entirely upon luck. But if we are a pet dog or are playing in an honest poker game, the factor of luck quickly diminishes; and its alleged manifestations depend upon individual strength, quick wits and a disbelief in luck. If we believe in luck while the man across the table believes in himself, the other fellow will not have to borrow clothes to wear home.

Luck is a concept behind which the weak can conceal their self-pity and by which the strong can maintain their modesty. To encourage belief in luck is to plant dry-rot upon skill.

46. LOOK BEYOND THE PLANT WALLS

Management which centers its attention on the company is tying its own hands. Betterments in routing, jigs and fixtures, sales strategy, and what not within the plant walls and company organization still miss a vital phase which modern developments have forced into a prominent position in efficient production and distribution.

Maytag is aware of this, so a Y. M. C. A. is financed.

Quality and production have both been brought under apparent machine dominance. Another way of saying the same thing, but with a different emphasis, is that now the worker is responsible for a \$40,000 machine where he used to be master over a \$20 kit of tools. Even the slightest worker failure

runs up a terrific overhead with the expensive machine.

In most factories lighting, ventilation, seating, and in some cases rest pauses, are used to keep working conditions in tip-top condition for best worker efficiency. Overhead is too great and various production steps are too interlocked now to give the slightest chance for a fluctuation in worker capability.

Shop hours used to be twelve a day; now they are nine, eight and even less in a few instances. Sunday used to be the only day spent away from the factory; now Saturday afternoon, and in many plants all day Saturday, is added to the brief holiday.

What the worker does while he is away from the works all these hours has more to do with his production than all the efforts of a ten thousand dollar engineer to improve the worker's machine and tools.

I could name a couple dozen concerns that are spending great sums to still further better conditions and methods within the plant, while they are neglecting the crucial problem changing trends have thrust upon them; and they will not look beyond the plant

walls for means of assuring that men on the \$30,000 machines come to the machine fit and capable to get every penny out of it every working minute.

Not paternalism, not welfare work, not interfering with the idle hours of the workers. But —

A small eastern plant making boys' clothing has a radio engineer on its staff on a part time basis. Radio parts are supplied workers at wholesale. This has made more of the hours away from the plant restful.

A southern steel mill maintains a co-operative garden plant for all employes. The company plows the plots and pays taxes. Employes and their families do the rest. This helps stretch the pay envelope and assures the firm that most of its workers are getting more healthful food and the benefits of ultra violet rays, and that they are not making merry to pass the idle hours.

A group of plants buried in the old vice district in Chicago saw that things were cleaned up after they realized the deleterious effects these had on production by employes coming to their machines in an unfit condition.

A mid-western electrical firm with a large plant abutting the wide open section of an adjacent village had funny things occurring in the works in the early afternoon. Noon-hour visits to gin mills across the company street were readily discovered to be responsible. Now the company has professional vaudeville and sponsors dancing contests during the noon hour, and trolley tracks have been transferred to the other side of the plant.

A small Missouri town dominated by one factory is no longer astonished by anonymous gifts — which I happen to know are from the president and 50 per cent stock holder of the concern. A free hourly nursing service relieves the fatigue and tension of the worker's home-folks. Child centers allow the worker and his wife to visit friends in peace while their children are checked.

An electric railroad maintains a loan and financial advice officer who eases over periods of financial crises so that the \$30,000 machine is kept running merrily by a worker free from this worry.

Communities are beginning to dominate the efficiency of plants. As the five day week gains, the community dominance will gain. As mechanical production advance shortens still more the hours in the works, the community dominance will continue to grow.

Plant engineers can supply improved machines and methods, but the community determines whether the men are going to be able to keep them producing at the new standards.

There are dividends in neglecting the plant for a week and looking over the community.

47. HERE'S WHERE SELLING IS NEEDED

Would you want your boy to follow your occupation? Would you be disappointed if he later took your desk with your company?

I have permission to tell the following story, but have been asked not to mention names. Not so long ago I became acquainted with a leading American

authoress in her early thirties. Her career has been phenomenal since she discovered that she was handicapped by lack of a vital incentive. To be honest, she did not make this discovery herself; a fatherly writer with more years writing experience than she had years on this planet made it for her. It is so with most who are similarly handicapped — these legions have to let a stranger make this discovery for them.

We will call her Helen. While still in college she had a few short stories accepted by national magazines, but the checks were small and the stories were hard to write. Backed up with her gift for fiction, Helen obtained employment with a sensational metropolitan daily and was soon having sob sister news stories appearing under her own name on the front page. These were easier to write and bought better food than the short stories. These sob stories gradually became poorer. It was obvious to the editor that Helen was slipping. Was she just a flash in the pan — a genius who produced only by fits and starts?

The elderly writer who had noted the promise of her earlier short stories made the same observation

as did the city editor. He sought an opportunity to become acquainted with her. "Easy trash," she told him her sob sister stories were, "but good enough for the tripe that read the daily blank."

Not sold on her job! "Quit tomorrow morning," was the fatherly advice.

Bodily needs safeguarded by half time tutoring work, she resumed production on the great short story. Today, five years later, you will probably find one of her stories in some of this week's magazines.

With her attitude of "easy trash" and "tripe," her job was merely a meal ticket and did not call forth her best efforts. She was doing work she could have done well, but she was given assignments rather than inspiration by her boss.

Ability is mothered by interest. It is smothered by visionless routine. Genius flourishes best when backed by conviction of the worth of the job.

Routine workers and executives are apt to see only the meal ticket in their job. The company must give them the broad view of the worth of their product

and their daily tasks. Continual selling effort to stimulate men to live up to their promise of achievement should be a central policy in every organization.

There are some organizations, however, that can not profit by this human stimulation:

High labor turnover and a high incidence of bankruptcies are found in concerns which turn out a poor
grade product, or a useless novelty. The cloak and
suit trade is gifted with many failures, but you may
have noted that the quality houses are still doing
business at the old stand on a bigger scale than ever.
It is human forces as well as economic pressure that
forces the shoddy houses out of the picture. They
can double a designer's salary and get only half of
their ability because even a subdivision agent could
not sell them the job. A doubled wage is a cheap
price for the loss of pride in the company.

Attitude as well as brute ability determines job performance. The worker brings only ability to his desk. The company is responsible for his attitude. If he does not want his boys to follow his footsteps with the firm, it is good evidence that the company

has failed to give the background and information and policies essential to foster the attitudes that help one rise to his full job stature.

From calls I have received I know that many presidents are worried about the ability of their executives in the crisis of the newer competition. To all presidents I would broadcast this message: Your men probably have ability adequate for most emergencies. It is up to you to stimulate them to rise to their full stature. Blame the men only after you are certain that you have a set-up into which they can throw every mental sinew.

And to all except the controlling executive: Try to visualize beyond your job-limits of today; then work on this magnified job perspective.







